A critical and analytical study of dynamic capabilities in strategic procurement: The Case of Six Welsh Local Authorities

By

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Faculty of Business and Society

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DECLARATION

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# GLOSSARY OF ACRONYMS

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<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AGW</td>
<td>Auditor General for Wales</td>
</tr>
<tr>
<td>CA</td>
<td>Competitive Advantage</td>
</tr>
<tr>
<td>CCPU</td>
<td>Central Corporate Procurement Unit</td>
</tr>
<tr>
<td>CIPS</td>
<td>Chartered Institute for Procurement and Supply</td>
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<tr>
<td>CP</td>
<td>Complex Performance</td>
</tr>
<tr>
<td>DC</td>
<td>Dynamic Capability</td>
</tr>
<tr>
<td>DCs</td>
<td>Dynamic Capabilities</td>
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<tr>
<td>IP</td>
<td>Innovation Partnership</td>
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<tr>
<td>KM</td>
<td>Knowledge Management</td>
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<tr>
<td>LGA</td>
<td>Local Government Association</td>
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<tr>
<td>PBPA</td>
<td>Procurement Best Practice Academy</td>
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<tr>
<td>PCP</td>
<td>Pre-commercial Procurement</td>
</tr>
<tr>
<td>PPI</td>
<td>Public Procurement Innovation</td>
</tr>
<tr>
<td>PSM</td>
<td>Public Sector Management</td>
</tr>
<tr>
<td>PSOs</td>
<td>Public Sector Organisations</td>
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<tr>
<td>PSP</td>
<td>Public Sector Procurement</td>
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<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
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<tr>
<td>RBV</td>
<td>Resource –base – view</td>
</tr>
<tr>
<td>SCA</td>
<td>Sustainable Competitive Advantage</td>
</tr>
<tr>
<td>SCM</td>
<td>Supply Chain Management</td>
</tr>
<tr>
<td>SPSP</td>
<td>Strategic Public-Sector Procurement</td>
</tr>
<tr>
<td>SSCI</td>
<td>Social Science Citation Index</td>
</tr>
<tr>
<td>SSCM</td>
<td>Sustainable Supply Chain Management</td>
</tr>
<tr>
<td>TCO</td>
<td>Total Cost of Ownership</td>
</tr>
<tr>
<td>USW</td>
<td>University of South Wales</td>
</tr>
<tr>
<td>VFM</td>
<td>Value for Money</td>
</tr>
<tr>
<td>VMI</td>
<td>vendor-managed inventory</td>
</tr>
<tr>
<td>VRIN</td>
<td>Valuable, rare, inimitable, and non-substitutable</td>
</tr>
<tr>
<td>WG</td>
<td>Welsh Government</td>
</tr>
<tr>
<td>WLAs</td>
<td>Welsh Local Authorities</td>
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<tr>
<td>WPPS</td>
<td>Welsh Public Policy Statement</td>
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<td>WPS</td>
<td>Welsh Public Sector</td>
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ABSTRACT

This thesis extends the concept of dynamic capabilities (DCs) in the context of public procurement (PP) in six Welsh Local Authorities (WLAs). This is the first attempt to link the concept of DCs with strategic public-sector procurement. Drawing from both perspectives, this study endeavours to examine DCs in the light of strategic public procurement to understand “How LAs use DCs in term of strategic conversion processes”.

The existing literature indicates that DCs has become a prevalent theoretical framework in the private sector (Pablo et al., 2007; Klarner et al., 2001; Osborn et al., 2008) to understand how organisations enhance performance and effectiveness in a rapidly changing environment (Teece et al., 1997; Eisenhardt and Martin, 2000; Pierce et al., 2002; Teece 2007) however, it has not yet been applied outside the private sector. The limited literature that studies DCs in the public sector has been discovered but none of the studies investigated DCs in a public sector procurement context. These studies suggest that DCs hold potential for the public-sector organisation (Lee, 2001; Carmeli and Trishle, 2004; Jones et al., 2005; Pablou et al., 2007).

A qualitative method using interpretive theoretical paradigm has been implemented with inductive logical approach combined with robust multiple case studies strategy. The empirical investigation comprises eleven semi-structured interviews with senior procurement experts that have a strategic role in the organisation providing insights on how they use DCs in strategic conversion. The collated data were analysed using both; thematic analysis (primary data) and content analysis (secondary data). For an analytical purpose this thesis disaggregates three core processes of the DCs: sensing, seizing and transforming drawing upon Teece’s (2007) conceptual framework.

Findings explicate microfoundations of DCs in public sector procurement, demonstrating potential to become a new strategic approach, guiding public sector organisations how to operate successfully in a dynamic, complex environment through strategic conversion of high-order procurement capabilities. Findings indicates that LAs may not be ready yet to implement such a futuristic approach since the maturity of procurement is yet to reach a strategic form – it is only something that large local authorities have recently embraced. This remain even challenging for small local authorities which, in some degree their approach to procurement seems to go backwards to the transactional procurement. Achieving such change is likely to
require interagency cooperation ("new combinations") and the ability to execute ("sensing"), not just talk. New futuristic model where LAs are run more like an enterprise has a little better chance of developing and deploying DCs in part because of the organisational culture and the latitude that leaders of these Authorities have.

This study offers DCs as an emerging paradigm of modern public sector procurement making three primary contributions to the body of knowledge. The study extends existing work on DCs in public sector organisation adding to theoretical development. The research strategy employed provides empirical evidence. Analysis reveals that WLAs with strong sensing, seizing and transforming capabilities are more leaning to support superior long-term procurement performance. The conceptual framework emerged from this study (Figure 21) helps understanding three strategic management activities; sensing, seizing and transforming in public-sector procurement enhancing flexibility and ability to address rapidly changing environment.

**Keywords:** Dynamic Capabilities, Strategic Public Procurement, Welsh Local Authorities.
CHAPTER 1: INTRODUCTION TO THE STUDY

1.0 INTRODUCTION

This thesis arises from the experience of being a research assistant at the Procurement Best Practice Academy (PBPA), University of South Wales (USW) engaging on various research projects in public sector procurement (PSP) in Wales commissioned by the Welsh Government (WG) to examine aspects of public sector procurement in those organisations. The initial idea being generated from the particular project entitled “All Wales Baseline Study of Procurement Competency in Relation to Spend.” The PBPA was commissioned in 2014 to produce a report which reviewed the number of professionally qualified staff in the Welsh Public Sector (WPS) relative to the spend per organisation, the value influenced by the procurement professionals and, to make recommendations on training, development, recruitment and retention. The study completed the work being undertaken by Value Wales to assess procurement capacity and capability through the Procurement Fitness Check Programme and its work to assess individual capability through the introduction of a competency framework. Several studies, however, have highlighted significant skill and capability gaps that impact public sector organisational performance (Beecham et al., 2006; McClelland, 2012; William, 2014; KPMG, 2014; Ringwald and Ndrecaj, 2014; Ringwald et al., 2015).

The public sector literature is also giving increased attention to the development and implementation of a new strategic paradigm encouraging entrepreneurial behaviour that enables proactivity - address current budgetary constraints and maximise organisational performance (Pablo et al., 2007) in a time of ‘environmental turbulences…complexity and the unpredictability of change’ (Piening, 2013, p. 233). Consequently, the new ways of working are indispensable to sustain the quality and scope of service delivery in the current climate (Local Government Association, 2016). Public sector managers are increasingly expected to use managerial strategies to improve organisational performance (Pablo et al., 2007). Concepts from the for-profit strategy literature have become more relevant to the public sector (Llewellyn and Tappin, 2003) since evolutionary changes are taking place as a result of the pace of the business environment (Teece, 2007).

The current complex and dynamic environment has strengthened the pressure on LAs to deliver more with less resources (Uyarra and Flanagan, 2009; Uyarra, 2010; 2013) to develop more
strategic driving innovation and to seek competitive advantage. The increasing pace of change, technology developments, changing perceptions, increased expectations, citizen empowerment, new approaches to remuneration and reward require a new approach (Bolton and Saxena-Iyer, 2009; Uyarra, 2010; 2013) to respond to these pressures. As a result, organisations are increasingly engaging with procurement in strategic decisions (Mena et al., 2014), although, they further argue that procurement could be seen as a risk that needs to be mitigated, or as an opportunity that creates competitive advantage (CA). However, the risk of challenge is not seen as a serious concern since PSP is considered as mechanically driven to meet procedures/regulations and often interfered with politically (Herbert, 2013). Uyarra and Flanagan (2009) depicted public procurement as a multi-object policy, the main goal of which must remain to ensure the quality of government services and the use of the products and services for the public sector.

The study offers DCs as an emerging paradigm for modern public sector strategic procurement. The topic is of great significance, due to the rapidly changing environment that the public sector is currently experiencing. This thesis extends DCs into a public procurement context with particular focus on six WLAs and the National Procurement Service (NPS) as an overarching body, to understand how WLAs use DCs in the strategic conversion. In studying DCs, over an extended period, it seeks to identify three component factors which reflect the common features of DCs in PSP creating microfoundations for DC as an umbrella framework that highlights the most critical procurement capabilities management needs to enhance organisational performance in the current economic environment.

1.1 Background to the research

1.1.1 The concept of dynamic capabilities: Why it matters?

The concept of DCs was first introduced by Teece, Pisano, and Shuen (1990), Teece et al., (1994); Teece et al., (1997) providing an intellectual structure for managers to start thinking systematically about why companies succeed or fail to address changes at the strategic and operational level (Teece, 2013). On their early study Teece et al., (1997, p. 516) described DCs as the ability of the organisation to “…integrate, build, and reconfigure internal and external competencies to address rapidly changing environment…” This still more or less applies, although the speed of change in the environment may be less relevant than the prevailing degree
of uncertainty (Teece et al., 2016). Other scholars i.e. Winter (2003); Ambrosini et al., (2009); Easterby-Smith et al., (2009); Killen and Hunt, (2010); Chien and Tsai, (2012) share the same view claiming that DCs concept has emerged as a result of a rapidly changing environment.

Early study by Teece et al., (1997) suggested that the purpose of DCs is to explore the state of existing internal and external organisational competencies to address the demands of a changing environment. Teece et al., further explained that this is not the only purpose since DCs also exist to achieve congruence with customer needs and with technological and business opportunities in an attempt to achieve long-term competitive advantage in a complex profit focused environment. In his recent publication Teece claim that DCs go further by recognizing that organizations not only adapt to the business environment, they often try to shape it, as well (Teece, 2018). Other scholars i.e. Eisenhardt and Martin (2000) and Helfat et al., (2007) suggested that DCs enhance technical efficiencies in the business function and also address organisational changes identifying the need to change and to accomplish these changes using appropriate organisational and managerial processes. There is an ongoing debate in the DCs literature suggesting that organisations need to develop and deploy unique difficult-to-replicate skills and capabilities in both internal development and external sourcing to be able to renew their capabilities and thrive over time (Helfat, et al., 2007).

Ten years later Teece (2007, p. 1319) defined DCs as a

“…capacity to …sense and shape opportunities and threats …to seize opportunities, and …to maintain competitive through enhancing, combining, protecting, and, when necessary reconfiguring the business enterprise’s intangible and tangible assets.”

This indicates that DCs are not a capability in the RBV context since it is “not a resource” but it is a “process that impact upon resources” developing an adequate resource base. They are future orientated, and they are specific in nature. Teece (2018) claim that, such capabilities are essential in long-term business success. He further explain that the goal is not short-term efficiency, as in classical management, but rather the maintenance of ‘evolutionary fitness’ over time. The accomplishment of this required organisations’ ability to respond rapidly and effectively not only to environmental threats but also to opportunities (Teece et al., 1997; Teece, 2007; Teece, 2018). Capability hierarchy is in the heart of the conceptual framework determining what the organisation is able to do and how effectively it could make changes.
Figure 1 shows other components of the framework that are discussed in chapter 2. The figure indicates that DCs must be congruent with strategic direction and entrepreneurial activities governing how ordinary capabilities and valuable rare, imperfectly imitable, and non-substitutable (VRIN) resources are combined and orchestrated. However, as indicated above, the focus of the study are clusters of DCs that align elements of three strategic activities; sensing, seizing, and transforming.

![Figure 1 The key elements of dynamic capabilities framework Source: Teece (2018, p. 363)](image)

The literature observed indicates that DCs have been mainly studied in the private sector context focusing on achieving competitive advantage (CA) in a dynamic environment (Teece et al., 1997; Helfat, 1997; Teece, 2000; Eisenhardt and Martin, 2000; Dyer and Nobeoka, 2000; Zahra and George, 2002; Zollo and Winter, 2002; Winter, 2003; Zott, 2003; Zollo and Singh, 2004; Jansen et al., 2005; Zahra et al., 2006, Newbert, 2007; Teece, 2007; Ambrosini and Bowman, 2009). DCs have become a prevalent conceptual framework for analysing how firms’ change taking a central stage in the debate in the strategic management literature (Teece et al., 1997; Eisenhardt and Marin, 2000; Zollo and Winter, 2002; Muldes, 2010) and providing the source of superior long-run business performance and sustainable CA (Teece, 2007; Zollo and Winter, 2002; Andreeva and Chaika, 2006). The interest in DCs has led to an increased understanding of the nature of DCs in non-traditional sectors such as the service sector. However, the early literature viewed DCs as hidden or invisible, implying that managers may
not even recognise the existence of DCs in practice (Pablou and El Sawy, 2011). The literature also suggests that the very limited work pertinent to services has focused on DCs in a procurement context (Li, 2013; and Hartmann et al., 2014).

1.1.2 Public-Sector Procurement and Current Challenges

Public procurement refers to the governments’ activity of purchasing the goods and services which it needs to carry out its function (Arrowsmith et al., 2011). Public procurement is broadly defined as the process by which governments and other publicly funded entities acquire the goods, works, and services needed to improve public projects (Walker and Brammer, 2009; Van Weele, 2010). Public Procurement is viewed as a process of acquiring resources from outside suppliers and in-house providers (Murray and Rentell, 2008; Murray, 2009; Lee et al., 2014) using state funds (Odhiambo and Kamau, 2003) to deliver public services Cabras and Mulvey, 2012) responding to overall demand (Uyarra and Flanagan, 2010). In other words, it is”...a business process within a political system” (Wittig 2002, p. 2). It is one of the key business functions (Mena et al., 2014), a “special case of business transactions” (Schapper et al., 2010).

The National Procurement Strategy for Local Government in England (2014, p. 7) states that “Procurement in Local Government has never been more important than it is today”. Jane Hutt, AM Minister for Finance and Government Business featured in a Wales Procurement Policy Statement (2015) declared “...when used effectively, procurement can be a strategic tool to deliver economic benefits to the people of Wales” (Wales Procurement Policy Statement, 2015, p. 1). The Chartered Institute of Purchasing and Supply (CIPS) describes procurement as “...the business management function that ensures identification, sourcing, access and management of external resources that an organisation needs...to fulfil its strategic objectives” (CIPS, 2005, p. 5). Although, one of the difficulties in defining the term procurement is that it does not deal with a single action or process. It covers the complete range of events from identification of need for good or service through to its disposal including activities and events before and after the signing of a contract as well as management activities associated with a range of contracts:

Pre-contract activities such as planning, identification of needs and analysis, and sourcing; Post-contract activities such as contract management, supply chain
management, and; general activities such as governance, supplier relationship management, risk management and regulatory compliance (ibid).

However, the main difference between public and private sector procurement is that the purchasing of goods or services is much stricter in the public sector, with more policies and procedures and ‘red tape’ compared to the private sector (Schapper et al., 2010). i.e. the Welsh Government’s policy statement sets out the overriding principles for public procurement, in the context of relevant EU and UK legislation. Figure 2. Shows the range of legal and policy frameworks that public sector procurement complies. The overarching legislation is set out in the European Union Directive on public procurement. The directive sets out detailed procedures that public bodies must follow before awarding a contract whose value equals or exceeds a specific threshold. The main reason for this is due to protecting tendering companies from unfair treatment and any misuse of power by procurement teams in general, whereas the private sector does not have as many restrictions when procuring goods and services (Lindskog et al., 2010). Public procurement is also very politically sensitive because it uses public money where as the private sector has its own funding for goods and services (Schapper et al., 2010). Although, it will be interesting to see the composition of the legal and policy frameworks after UK leave the EU.

This means that the public sector has tighter restrictions on how it carries out procurement compared to the private sector, however these restrictions can be beneficial to both the authorities and suppliers as competition is promoted to ensure value for money and procurement opportunities are open and transparent to allow fair access for all suppliers in the market (Tadelis, 2012). However, overall the literature in the procurement field claim that procurement has lately been involved in organisations’ strategies, have border and cross – sectional roles, manage and develop supply chains, and act as a source of innovation (Mena et al., 2014; Uyarra et al., 2014).
Figure 2: Legislative and Policy for Public Procurement in Wales. Source: Wales Audit Report (October 2017, p. 19)
PSP is a function to assist public sector organisations to perform and deliver their services effectively to their geographical area (Lindskog et al., 2013). The OECD (2011) has identified that by procuring innovative services and solutions the public sector can deliver services efficiently, but also assist and influence innovation in the activities of private sector organisations. Another difference between public sector and private sector procurement is that the public sector tries to involve a lot of suppliers to boost competition between tenders, however the private sector eliminates the number of suppliers to reduce possible risks (Vaidya et al., 2006). PSP also has higher demands and is more varied than private sector procurement (Telegen et al., 2007 cited by Arlbjørn and Freytag, 2012). Although many of the goods and services provided by the PSP could be provided by the private sector even though the rules and regulations between both differ (Arlbjørn and Freytag, 2012).

Inversely, PSP within the European Union must follow principles to be fair and transparent to all that tender (Lindskog et al., 2013); PSP must not discriminate against any company because of nationality. All tenders involved in the process must be treated equally and have access to all information given. The tender process must be transparent, and open to which suppliers can predict the process and know exactly what they are being evaluated against to avoid any challenges. All specifications must relate to the supplies of the services or works being procured. Knutsson and Thomasson (2014) state that EU regulations are reducing innovation and competition in various markets. EU Regulations aim to reduce trade barriers and increase competition, but research shows that the complexity of the regulations encourages public sector purchasers to play it safe, therefore the processes become inflexible in order to avoid the potential for any bidder to appeal a contract, which can be costly and halt all further procurement processes regarding that contract until the issue is resolved, (Schapper et al., 2006; Uyarra and Flanagan, 2010). This perception of the regulations being complicated has also affected smaller businesses that are deterred from tendering, which has resulted in the market being dominated by large suppliers, (Karjalainen and Kemppainen, 2008). However, Uyarra et al., (2014) argues that the EU regulations do not prohibit engaging with the market in order to stimulate innovation to fulfil unmet market needs.

However, public-sector procurement is moving towards private sector practices (Quayle et al., 2000; Quayle and Quayle, 2000; Caldwell et al., 2009), being innovative and sharing best practice and encouraging larger scale competition (Caldwell et al., 2009). However,
researchers claim that there are differences in the roles and responsibility of purchasing between private and public sector (Zheng et al., 2007). Due to budget cuts, LAs are using public-private collaboration to help reduce spending. Furthermore, it is not only important to achieve efficiency in spending, but also to achieve social and environmental benefits when procuring services to fulfil their responsibility to society (Walker and Brammer, 2009) and to increase innovation and economic development (Uyarra and Flanagan, 2010). In such an environment, public management could focus on short term opportunities to gain bargaining power to maximise cost reduction (Cox, 2001; 2004). However, having good procurement management from a strategic perspective in the long term can reduce costs and improve efficiencies during turbulent times (Murray, 2009). In contrast, public sector procurement teams have been criticised in that they are still focused on reducing transactional costs rather than considering the acquisition costs to provide overall value for money suggesting that by not considering both transactional and acquisition costs public-sector procurement teams are not providing value for money (Staples and Dalrymple, 2011; Deasy et al., 2014). This remains one of the main aims within UK procurement policies but due to the recent budget cuts making savings on spending has become an overriding focus (Loader, 2005; 2007; 2013).

Public procurement plays a significant role in the Welsh economy, with annual public procurement spending of £6 billion on goods and services and work, of which the 22 WLAs spend 53%. The Wales Procurement Audit Report (2017, p. 31) refers to the data collected by the ‘Collaborative Spend Analysis’ project for 2015-16 which shows that, WLAs spend £3.3 billion through procurement, over half of all procurement expenditure in Wales (AGW, 2017). The largest spending local authority was Cardiff Council, which spent £390 million (12% of all local authority procurement spend and 29% of its own total expenditure) (See Appendices - Figure 1). The smallest spending local authority was the Isle of Anglesey County Council which spent £71 million, but equivalent to 32% of its total expenditure. A third of all local authority procurement spend (£1.1 billion) was on goods, services and works relating to construction, facilities management and utilities.

Figure 3. represents the complexity of the environment and the challenges that Welsh Local Governments are currently facing. These elements are not mutually exclusive. Across Wales, and the UK, there have been several reports outlining these challenges. In Wales, the Simpson Report (2011), which reviewed practices in local government, recommended developing greater collaboration and shared services at local, regional and national levels; developing
leadership capacity and the culture of the procurement profession; and investing in the processes used for purchasing (in particular electronic solutions) to ensure that cost efficiency could be achieved. Other reports have highlighted significant skill and capacity issues to be addressed if procurement is to be more cost effective (Gershon, 2004). Audit Scotland in 2016 published a study, which examined the impact of a set of activities to advance the efficiency and effectiveness of activities to improve purchasing in the public sector. Their findings show that the Scottish Government was taking several steps to improve skills in the area including: introducing a staff development program, improving training opportunities with the Chartered Institute for Procurement and Supply (CIPS), and introducing competency guidelines to help public bodies to recruit staff in this area. It also stated that more had to be done for this to affect the bottom-line (Audit Scotland, 2016).

An early study by Beecham et al., (2006) claimed that a common thread in public sector reform in Wales has been the need to enhance the efficiency and use of resources by public services. The Review claimed that,

“The challenge now is to ensure that the capability of the delivery system - staff, structures and processes - match up to the aspirations of the National Assembly, Assembly Government and the needs of citizens in Wales. This requires action to tackle the constraints of organisational culture, capacity and process complexity... Procurement and contracting skills are a key capacity constraint identified in the evidence.” (Beecham et al., 2006, p 10)
Figure 3: Welsh Procurement Environment. Source: Adapted from National Procurement Strategy for Local Government in England (2014, p. 12)
However, despite steps to improve procurement practices (including collaboration, policy guidance, tools and training and the development of e procurement capability), significant challenges remain. The Welsh Government’s Efficiency and Innovation Board continually provides practical leadership to tackle particularly capability issues. The office of Governance and Commerce (2007) also acknowledged that capability shortage remains one of the current challenges for central and local Government. They stated that “...we will only achieve good procurement across Government if we know we have the right skills and capability in place.”

The E & I Procurement Taskforce (2011) also reported that: “Procurement officers lack the influence, confidence, or position to challenge and drive change.” The McClelland Review (2012, p. 29) of public procurement for the Welsh Government highlighted many of the same problems. In a section on ‘procurement capability’, the Review examines the numbers of staff within designated procurement functions / departments, and the skill levels and professionalism of these staff. It concludes that against benchmarks developed in previous studies, i.e. McClelland (2012) made an explicit statement in regards to a resource deficit and skills gap particularly in relation to the lack of commercial skills, including contract management, post tender negotiation, and in using procurement for the achievement of broader strategic aim. His findings indicate that less than one-third of procurement staff in public-sector organisations in Wales were found to be members of CIPS. Although, this does not mean that all are necessarily fully qualified.

The Welsh Government’s response to the McClelland Review was the revision of the Wales Procurement Policy Statement (See Appendices p. 351) which established nine principles of Welsh Public Procurement Policy (WPPP): First, ‘strategy’ viewing procurement as “a strategic corporate function” (WPPP, 2015, p. 3); Second, ‘professionally resourced’ stressing the importance of adapting the benchmark suggested in the McClelland Review of one procurement professional per £10 millions of spending; Third, Economic, Social and Environmental Impact highlighting the role of the procurement not only as a mechanism that generates efficiency savings and good quality outcomes but also have a positive impacts on society, the economy, and the environment; Fourth, Community Benefits policy as an integral consideration in procurement. The policy states that this should be an “integral consideration in procurement.” The wider role of public procurement functions in helping to achieve strategic goals is also illustrated in the 2013 Innovation Wales strategy. For example, Value Wales is tasked with raising: “Welsh public sector awareness of the scope to use innovative procurement to improve outcomes.”; Fifth, Open, accessible competition stressing the
importance of adapting risk based assessment giving an equal contract opportunity to all despite the size of the company; Sixth, Simplified Standard Processes developing and promoting simplified approaches based upon the adaption of common systems and procedures; Seventh; collaboration delivering collaborative contracts and frameworks through the National Procurement Service (NPS). The policy statement states: “Areas of common expenditure should be addressed collectively using standardised approaches and specifications managed by the NPS to reduce duplication, to get the best response from the market, to embed best practice; and to share resources and expertise.”(WPPP, 2015, p.7); Eight, Supplier Engagement and Innovation highlighting the importance of improving the dialogue with suppliers to help getting the best response from the market place; Ninth, Policy development and implementation – “development of policy which supports the achievement of seven well-being goals for Wales as set out in the Well-being of Future Generations (Wales) Act (2015).”(WPPP, 2015, p. 8)

This indicates that the WG is committed to deliver a world-class public service using public procurement as innovative policy to enrich effectiveness, efficiency and accessibility (Welsh Government Report, 2014).

However, the Williams’ Review (2014) claimed that PSOs are facing five major challenges;

1. complexity of the environment,
2. lack of capability,
3. governance, scrutiny and delivery,
4. leadership and culture; and,
5. performance and performance management.

The report claims that the effects of the recession and austerity on public-sector budgets will continue to be felt for many years. At the same time, the population is growing, becoming older, and public expectations are higher than ever before. This creates severe pressures – increasing demand for public services while resources are falling. The public sector simply cannot cope with these pressures in their present form and the way in which they operate. Issues inherent in the systems, processes and culture required a new way of thinking alongside of exploring new paradigms. This means that WLAs need to determine whether organisational procurement capabilities are adequate (KPMG, 2014). The William’s Report (2014) suggests that radical change is needed for the public sector in Wales to survive in a viable and sustainable form, particularly focusing on their strategic approach since the problems Williams found are in systems, processes, and the values of the public sector as it stood. In order for this to happen,
LAs need to build high order capabilities that enable them to drive innovation through public procurement and contracting (Uyarra and Kieron, 2009; Uyarra et al., 2014). This becomes a challenging task, when managers have to satisfy multiple, potentially conflicting goals imposed on them by numerous stakeholders (Osborne and Brown, 2005; Fernandez and Rainey, 2006; Rashman et al., 2009; Piening 2013). As a result of this complexity the development and deployment of higher level capabilities have become a very challenging task (Borins, 2001; McNulty and Ferlie, 2002; Ridder et al., 2005), whilst LAs are confronted with demands for change and performance improvement (Boyne et al., 2005; Mack et al., 2008; and Piening, 2013).

Conversely, early literature indicates that these challenges have not emerged recently, i.e. in the last decade Schofield (2007) recognised seven challenges that determine the leadership and management approach; (1) Increasing pace of change, (2) Technological development, (3) Changing perceptions, (4) Increasing expectations, (5) Citizen empowerment, (6) Changing workforce, and (7) Complexity of the environment. Whilst, there is a growing interest recently in the private sector strategic approaches one of which is the concept of DC (Klarner et al., 2001; Pablo et al., 2007; Cepeda and Vera, 2007; Osborn et al., 2008; Klein et al., 2010; Piening 2013) it has become a prevalent theoretical framework analysing how firms change in a volatile environment (Teece et al 1997; Eisenhardt and Martin, 2000; Teece et al., 2002; Teece, 2007).

1.1.3 Changing Paradigm of the Public Sector

The public-sector literature suggests that the paradigm of public sector management (PSM) are changing radically due to the pace of the environment (Benington and Hartley, 2001; Kelly et al., 2002; Hartley, 2005; O’Flynn, 2005a; and Stoker, 2006). Trends reshaping the environment during the past decade have created new opportunities for procurement to enhance LAs overall performance. Supply markets and public-sector management have become more dynamic and complex, as they need to act in a more entrepreneurial way. As a result, the role of public procurement is shifting from a traditional to a strategic function (Matthews and Shulman, 2005; Edler and Georghiou, 2007; Brammer and Walket, 2011) since in this environment, even excellence in traditional procurement core activities is no longer enough.
Table 1 summaries these changes that have wide-ranging implications for PSM. Reforms, transformation, and restructuring have become endemic in PS since the decline of older classical managerial paradigms.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Traditional Public Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context</td>
<td>Stable</td>
</tr>
<tr>
<td>Population</td>
<td>Homogeneous</td>
</tr>
<tr>
<td>Needs/Problems</td>
<td>Straightforward, defined by professional</td>
</tr>
<tr>
<td>Strategy</td>
<td>State and producer centre</td>
</tr>
<tr>
<td>Governance through actors</td>
<td>Hierarchies - Public servants</td>
</tr>
<tr>
<td>Key concepts</td>
<td>Public goods</td>
</tr>
<tr>
<td>Improvement</td>
<td>Large step-change</td>
</tr>
<tr>
<td></td>
<td>Improvements initially, but less capability for continuous improvement</td>
</tr>
</tbody>
</table>

**New Paradigms Emerged**

<table>
<thead>
<tr>
<th>Characterisation</th>
<th>New Public Management</th>
<th>Public Value Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant Focus &amp; Managerial goals</td>
<td>Results</td>
<td>Achieve agreed performance targets</td>
</tr>
<tr>
<td></td>
<td>Post – Bureaucratic, Competitive Government</td>
<td>Post-Competitive</td>
</tr>
<tr>
<td>Definition of the public interest &amp; Performance objectives</td>
<td>Individual preference is aggregated</td>
<td>Management of the inputs and outputs to ensure economy and responsiveness to consumers</td>
</tr>
<tr>
<td></td>
<td>Multiple objectives are pursued including service outputs, satisfaction, outcomes, trust and legitimacy</td>
<td></td>
</tr>
<tr>
<td>Dominant model of accountability</td>
<td>Upward accountability via performance contracts: outwards to customers via market mechanisms</td>
<td>Multiple accountability systems including citizens as overseers of government, customers as users and taxpayers as funders</td>
</tr>
<tr>
<td>Preferred system of delivery</td>
<td>Private sector tightly defined arms-length public agency</td>
<td>Menu of alternatives selected pragmatically</td>
</tr>
</tbody>
</table>

Both practitioners and scholars are increasingly interested in the idea of the changing paradigm of the PS as a way of understanding government activity, informing policy-making and constructing service delivery. Several studies i.e. Kelly et al., (2002); Stoker (2006); Horner et al., (2006); O’Flynn (2007); Jantz (2009); Walker (2009); Greve (2010) claimed that each of the new emerging paradigms are seen as an alternative to traditional public administration. A
key element here is that each of these paradigms has implications for public procurement. However, this is not the focus of the study but it might be in further research projects. The radical change and redesign of public sector management to improve the quality of service delivery and achieve cost efficiency requires the development of procurement capabilities needed to drive a large scale transformation and meet current challenges.

1.1.4 Procurement transformations

Procurement transformation is a relatively new concept (CIPS, 2014). It has been positioned within wider discussions of change management and transformational leadership (Day and Atkinson, 2004). Study by Hughes et al., (2011) claims that procurement transformation relies on the application of various tactical, strategic and transformational tools and techniques and can positively impact on cost control and management, extending and pioneering new business structure. The impetus of the procurement function in light of current developments is becoming more strategic (CIPS, 2014). Current environmental pressures, technological and product innovation require organisations to develop and deploy high-level capabilities and acquire knowledge of change management (CIPS, 2014). In the last three decades, the role of procurement has been transformed from a clerical activity into a strategic function (Tassabehji and Moorhouse, 2008; Mena et al., 2014). This transformation is well reflected in the literature of Carr and Smeltzer, (1997); Scheuing (1997); Ramsay (1998); Lamming et al., (2000); Handfield and Nichols (2000); and Knudsen (2003), who all recognised the shift in the procurement paradigm towards a strategic approach which, involves strategic partnership, cooperative alliances and supply network management.

Traditionally a purchasing role would involve activities such as administration, dealing with quality problems, expediting information and managing parts delivery, market testing and price negotiations. In contrast, in strategic procurement context purchasing professionals are expected to carry out many more strategic activities. Swinder and Seshadri (2001) and Ryals and Rogers (2006) assert that strategic procurement incorporates actions aimed at reducing the supplier base, negotiations, communication and maintaining long-term relationships with suppliers. Whereas, Emmett and Crocker (2013) further explain that strategic procurement activities incorporate actions aimed at cost reduction and planning, supplier measurement and improvement, supplier strategies, product development strategies and more in-depth negotiations, which are not just based on price. Early study by Cox et al., (1998) defined
strategic procurement as a process that “…addresses the largely unrecognised problem of
misalignment between business strategy, supply relationships and operational practices…”.
Similarly, Mena et al., (2014, p. 13) define strategic procurement as “…a process that connects
organisational strategy with day-to-day procurement operations…” aiming to “…develop and
lead supply base in the direction that contributes to the organisation’s strategy and leads to
competitive advantage.” Alternatively, Kidd (2013, p. 6) explained that strategic procurement
“… relates to the strategies and mechanisms used to approach and interact with the supply
market that take account not just of present business needs but also what the organization’s
business future needs might be”. Despite the above content strategic procurement has not yet
been embraced by public sector organizations.

The growth in interest in strategic procurement is evident. Baily et al., (2008) explained and
identified three main reasons why organisations should develop strategic procurement; (1)
purchasing is seen as an area of adding value, not implying only simply a reduction of costs,
(2) rapid product innovation requires a more integrated management team, involving all
functions, and adapting a process rather than a functional approach to management, and (3) the
move to a holistic view concerning the integration of materials and information flows, both
internally and externally. Therefore, a proactive strategic procurement operation can enable the
organisation to achieve CA by reducing cost/waste in the supply chain. Purchasing policies
however, cannot be developed in isolation; they need to be integrated with corporate strategy
to succeed.

Further research in procurement dynamics by Schapper et al., (2006, p. 8) discussed the public
procurement evolution from traditional to strategic, arguing that this evolution happened
through continuous pressures and a requirement for procurement to deliver high performance
in term of improved “value-for-money” and to be “fit-for-purpose”. This has led to the
development of more complex supply chains to deliver comprehensive service solutions,
requiring more collaboration and long term relationships with suppliers. This represents a move
away from simple competitive markets and requires a deeper understanding of an industry’s
structure and capabilities. In addition, they described traditional procurement as an
organisational function that required only simple processes, large goods, sourcing
consideration, low value, low risk, and basic skills. On the other hand, strategic procurement
is actively engaging in shaping organisational strategy since it involves complex contracts and
relationships, complete service solutions, strategic business decisions, high value, high risk and high-level skills.

More recent research by Ubeda et al., (2015), also focused on procurement transformation. They assert historically that procurement within organisations was just a function, which operated for other departments to process orders usually for the production department, and to maximize cost savings. The procurement department was an additional activity for organisations, which had hardly any importance and was given very little consideration within organisational strategies as it was only responsive internally and was perceived as a low value function (Keough, 1993).

<table>
<thead>
<tr>
<th>Authors</th>
<th>Procurement Paradigms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syson (1989)</td>
<td>Clerical (transactional)</td>
</tr>
<tr>
<td></td>
<td>Commercial</td>
</tr>
<tr>
<td></td>
<td>Strategic (proactive)</td>
</tr>
<tr>
<td>Freeman and Cavinato (1990)</td>
<td>Standalone function</td>
</tr>
<tr>
<td></td>
<td>Align with the rest of the firm</td>
</tr>
<tr>
<td></td>
<td>Value Creation</td>
</tr>
<tr>
<td></td>
<td>Leader to competitive advantage</td>
</tr>
<tr>
<td>Cammish and Keough (1991)</td>
<td>Serve the factory</td>
</tr>
<tr>
<td></td>
<td>Lowest unit cost</td>
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<td></td>
<td>Co-ordinate Purchasing</td>
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<tr>
<td></td>
<td>Strategic procurement</td>
</tr>
<tr>
<td>Stannack and Jones (1996)</td>
<td>Stage 1 Product centred</td>
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<tr>
<td></td>
<td>Stage 2 Process Centred</td>
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<tr>
<td></td>
<td>Stage 3 Relational</td>
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<tr>
<td></td>
<td>Stage 4 Performance centered</td>
</tr>
<tr>
<td>Jones (1997)</td>
<td>Infant</td>
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<tr>
<td></td>
<td>Awakening</td>
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<td></td>
<td>Developing</td>
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<td></td>
<td>Mature</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
</tr>
<tr>
<td></td>
<td>Stage 2 Independent</td>
</tr>
<tr>
<td></td>
<td>Stage 3 Supportive</td>
</tr>
<tr>
<td></td>
<td>Stage 4 Integrative</td>
</tr>
<tr>
<td>Mathew (2005)</td>
<td>Tactical (Historic)</td>
</tr>
<tr>
<td></td>
<td>Strategic (Leading)</td>
</tr>
<tr>
<td>Cousins et al., (2006)</td>
<td>Undeveloped</td>
</tr>
<tr>
<td></td>
<td>Celebrity</td>
</tr>
<tr>
<td></td>
<td>Capable</td>
</tr>
<tr>
<td></td>
<td>Strategic</td>
</tr>
<tr>
<td>Beukers et al., (2006)</td>
<td>Transactional Orientation</td>
</tr>
<tr>
<td></td>
<td>Commercial orientation</td>
</tr>
<tr>
<td></td>
<td>Purchasing coordination</td>
</tr>
<tr>
<td></td>
<td>Internal/external integration</td>
</tr>
<tr>
<td></td>
<td>Value chain integration</td>
</tr>
<tr>
<td>Schapper et al., (2006)</td>
<td>Traditional procurement</td>
</tr>
<tr>
<td></td>
<td>Strategic procurement</td>
</tr>
<tr>
<td>Bally et al., (2008)</td>
<td>Operational Level</td>
</tr>
<tr>
<td></td>
<td>Tactical Level</td>
</tr>
<tr>
<td></td>
<td>Strategic Level</td>
</tr>
<tr>
<td>Mena et al., (2014)</td>
<td>Transactional</td>
</tr>
<tr>
<td></td>
<td>Cost driven</td>
</tr>
<tr>
<td></td>
<td>Integrated</td>
</tr>
<tr>
<td></td>
<td>Leading (Strategic)</td>
</tr>
</tbody>
</table>

*Figure 4: Overview of Procurement Transformation Paradigm. Source: White et al., (2016, p. 287)*
Figure 4 indicates that procurement has evolved over time and has changed from just clerical function to a strategic tool (Tassabehji and Moorhouse, 2008) and has become a major function for many organisations in both the private and public sectors (Paulraj et al., 2006). To achieve long-term competitive advantage and sustainability strategic procurement is now seen as focused on value creation with proactive strategies rather than being cost efficiency focused (Noonan and Wallace, 2004; Tassabehji and Moorhouse, 2008).

Early work by Reck and Long (1988); Freeman and Cavinato (1990); Burt and Doyle (1993); Cousins et al., (2006); and Schiele (2007) outlined the steps of procurement transformation from an organisational function to a strategic tool that is actively engaged in shaping organisational strategy, and the leading supply element base in the search for sustainable competitive advantage (Mena et al., 2014). The models shown in Figure 4 demonstrate a changing attitude towards procurement over the last three decades as a congruency of environmental changes. However, the field is still underdeveloped since none of the models have been widely accepted due to their limitations (Ubeda et al., 2015).

Alternatively, Mena et al., (2014) argue that the importance of procurement has been growing since 1980, but the 2010 recession in the UK has significantly boosted the development of procurement as a vital strategic process. Businesses have gone from having a transactional procurement process to progressing to a leading procurement process where procurement is one of the most important element of their company’s activities. Historically, there was a hostile response to procurement becoming strategic in many organisations due to doubts of how much impact procurement can have on savings (Russill, 1997). Currently though acceptance is higher as the benefits of having purchasers with specialist knowledge are being realised.

Mena et al., (2014) based on the early work of Reck and Long (1988); Freeman and Cavinato (1990); Burt and Doyle (1993); Cousins et al., (2006); and Schiele (2007) developed the maturity model that indicates four stages of the procurement transformation as shown in Table 2. Mena et al., (2014) claimed that procurement has experienced many changes in scope and scale over the last decade. The success of a business is largely contingent upon its ability to adapt to change over time and to evolve to changes in the dynamic environment. These changes will inevitably create multiple distinct challenges associated with processes (Lewis and Roehrich, 2009).
<table>
<thead>
<tr>
<th>Alignment/involve in strategy</th>
<th>Transactional</th>
<th>Cost driven</th>
<th>Integrated</th>
<th>Leading</th>
</tr>
</thead>
<tbody>
<tr>
<td>o No strategic orientation or involvement</td>
<td>o Independent from the organisations strategy</td>
<td>o Integrates the organisational strategy</td>
<td>o Influences organisations strategy</td>
<td></td>
</tr>
<tr>
<td>o Transactional</td>
<td>o Commercial activities</td>
<td>o Active in make – buy decisions</td>
<td>o Provides strong impute to values and strategies</td>
<td></td>
</tr>
<tr>
<td>o Integrated</td>
<td>o Tendering</td>
<td>o Outsourcing</td>
<td>o End –to-end supply chain management</td>
<td></td>
</tr>
<tr>
<td>o Leading</td>
<td>o Negotiation</td>
<td>o Global sourcing</td>
<td>o Few areas of external spend untouched</td>
<td></td>
</tr>
<tr>
<td>o No strategic orientation or involvement</td>
<td>o Getting the deal</td>
<td>o Focus on strategic sourcing</td>
<td>o Relationship management and supplier development</td>
<td></td>
</tr>
<tr>
<td>o Cleric in nature</td>
<td>o Limited SRM</td>
<td>o Portfolio approach to relationships</td>
<td>o Close internal alignment</td>
<td></td>
</tr>
<tr>
<td>o One off negotiations with suppliers</td>
<td>o Moderate integration with internal functions</td>
<td>o Engagement in SRM</td>
<td>o Seen as customer of choice by suppliers</td>
<td></td>
</tr>
<tr>
<td>o Order processing</td>
<td>o Technical competence</td>
<td>o Extensive internal integration</td>
<td>o Engage with other stakeholders</td>
<td></td>
</tr>
<tr>
<td>o Hardly any tendering</td>
<td>o Negotiation and commercial skills</td>
<td>o Systematic integration of training plans</td>
<td>o Close internal alignment</td>
<td></td>
</tr>
<tr>
<td>o Clerical</td>
<td>o Training provided</td>
<td>o Transformational and leadership skills</td>
<td>o Attract top talent</td>
<td></td>
</tr>
<tr>
<td>o Technical skills gap</td>
<td>o Training provided</td>
<td>o Continuous development</td>
<td>o Professionalized</td>
<td></td>
</tr>
<tr>
<td>o Some training provided</td>
<td>o Professionalized highly technical competence</td>
<td>o Technical competencies</td>
<td>o Highly technical competencies</td>
<td></td>
</tr>
<tr>
<td>o No structured target and limited follow-up</td>
<td>o Targets and reviews focused on financial results</td>
<td>o Good project management skills</td>
<td>o Transformational and leadership skills</td>
<td></td>
</tr>
<tr>
<td>o Focus on number of purchase orders handled, volume metrics and order process compliance</td>
<td>o Focused on price reductions and contract coverage</td>
<td>o Systematic integration of training plans</td>
<td>o Continuous development</td>
<td></td>
</tr>
<tr>
<td>o No structured target and limited follow-up</td>
<td>o Balance scorecard</td>
<td>o Attract top talent</td>
<td>o Comprehensive balanced scorecard</td>
<td></td>
</tr>
<tr>
<td>o Focus on number of purchase orders handled, volume metrics and order process compliance</td>
<td>o Focus on total cost of ownership (TCO) and business alignment</td>
<td>o Continuous monitoring</td>
<td>o Continuous monitoring</td>
<td></td>
</tr>
<tr>
<td>o Technical skills gap</td>
<td>o Focus on total cost of ownership (TCO) and business alignment</td>
<td>o Focused on TCO, innovation, sustainability and continuous improvement</td>
<td>o Focused on TCO, innovation, sustainability and continuous improvement</td>
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</table>

**Table 2: Procurement Maturity Model. Source: Mena et al., (2014, p. 10)**
The maturity model (Mena et al., 2014) indicates that at the stage of the transactional procurement there is little or no strategic involvement from procurement and the function is not seen as strategic for the organisation. It is decentralized/administrative organisational function that intends to focus only on serving basic needs for the supply of material and services. The main procurement activities evolve processing orders and chasing suppliers, and the decisions have a short – term impact. The contribution to the organisational performance is limited and the key focus is cost reduction. The procurement professional at this stage does not require a high order capability; only clerical and basic skills which allow them to fulfil day-to-day tasks.

However, cost-driven procurement has a strategic intent, but it is not necessarily aligned with the organisational strategy (ibid). Although, the function involves analytical approaches with particular focus on cost reduction, taking a more holistic view of cost using spend analysis and total cost of ownership (TCO) as a management tool. Therefore, at this stage it is required that procurement professionals should have strong analytical skills that allow them to carry out analysis and identify options that enable them to have a return on investment. Good negotiation and contracting skills to be able to get the best deal from suppliers are also required.

Alternatively, the integrated procurement stage requires a change in mind-set - from a cost perspective to a wider range of financial and non-financial aspects including risk management, value added processes, innovation, and growth shifting procurement from cost driven to value creation. Procurement has its strategy alignment with the organisation acknowledging the key role in enabling the organisation to meet unprecedented challenges such as increasing demands and expectations for services at time when budgets are reduced. At this stage the focus of procurement is on integrating and aligning strategies and processes with stakeholders across the supply chain. The establishment and management of the portfolio of relationships becomes an essential task. The paradigm of contribution shifts to value creation and commercial aspects. However, a procurement professional’s capability set framework establishes wider range of
skills and capabilities and that public procurement professionals should be equipped at various levels enabling them to take procurement to a strategic level, managing and mastering the level of complexity and uncertainties.

Conversely, Paulraj et al., (2006) identified three characteristics of strategic procurement: (1) firms at the nascent stage of strategic purchasing need to realise that moving towards the more advanced stage engenders supply integration, (2) practicing executives must understand that the procurement function can play a key role in integrating the buyer-supplier opportunities by focusing on diverse aspects such as process, relational, information, and cross-organisational teams, and (3) strategic procurement can have a profound impact on supply chain performance that subsequently creates a win-win situation for both the buyer’s and supplier’s firms. Nonetheless, this indicates that the shift to strategic procurement involves a radical change moving from alignment with strategy towards formulating strategy in sync with other key functions. Procurement professionals at this stage, particularly those involved in strategic decision-making, require a very broad range of transformational, visioning, and influencing skills. They need to be able to create and maintain a strong relationship throughout the supply chains which requires high order capabilities.

1.1.5 Research into procurement capabilities: The state of knowledge

Research on procurement capabilities has notably increase in recent years (Ancarani and Zsidisin, 2010). An early study by Rothwell and Zegveld (1981) claimed that strategic procurement requires a greater degree of in-house competence. While Georghiou et al., (2010) found a shortage of commercial skills among procurers which impacted on engagement with the marketplace and the development of closer supplier relations. The research conducted in small countries in Europe, identified a lack of sufficient procurement expertise for complex purchases involving innovation as well as an absence of formal training for procurers. Similarly, in the UK, a review for the Cabinet Office by Green (2010) noted that commercial skills were very inconsistent across central government. Another study by Byatt (2001) found considerable corporate capability constraints for English local authorities. Skill constraints in turn significantly hinder the adequate use of potentially more ‘innovation-friendly’ procurement procedures such as competitive dialogue (HM Treasury, 2010a). Indeed, as HM Treasury (2010, p.7) notes: “the outcome of a procurement will be influenced as much by the
“capacity and capability of those party to the process as by the nature of the contract to be delivered.”

Various studies underline the position on procurement capabilities (Ordanini and Rubera, 2008; Hartmann et al., 2010; Spring and Araujo, 2014) and Flynn and Davis (2016) ascertaining various procurement capabilities shown in Table 3. Although, the recent study by Flynn and Davis (2016, p. 4, 5 and 6) investigated the effect of tendering capability on SMEs activity and performance in public contract competition drawing attention to three public procurement capabilities; “tendering capabilities”, “relationship capabilities”, and “procedural capabilities.” They argued that in the public procurement context, capability implies the ability of the public sector to utilise it resource base in order to identify contract opportunities, and subsequently position itself to exploit them. In other words, it is the ability to leverage organizational resources – human, technological, financial, administrative, network and reputation. The development and deployment of procurement capabilities are vital in the context of procurement strategic activities (Hartmann et al., 2010).

<table>
<thead>
<tr>
<th>Authors</th>
<th>Capabilities</th>
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<tbody>
<tr>
<td>Ordanini and Rubera (2008)</td>
<td>o Process efficiency capabilities</td>
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<td>o Process integration capabilities</td>
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<tr>
<td>Hartmann et al., (2010)</td>
<td>o Contractual capabilities</td>
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<td></td>
<td>o Relationship capabilities</td>
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<tr>
<td>Spring and Araujo (2014)</td>
<td>o Indirect capabilities</td>
</tr>
<tr>
<td>Flynn and Davis (2016)</td>
<td>o Tendering capability</td>
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<td></td>
<td>o Relational capability</td>
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<td></td>
<td>o Procedural capability</td>
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An early study by Ordanini and Rubera (2008) identified two key capabilities in the procurement domain: (1) Process efficiency capabilities associated with the ability of the organisation to reduce costs while maintaining relationships with external suppliers and internal activities complementary to the purchasing transaction, and (2) process integration associated with the ability to effectively incorporate procurement in the whole supply chain, reducing time-to-market and increasing the fit to the market need. Likewise, Spring and Araujo (2014, p. 158) focused on the “indirect capabilities” analytically distinct from the notion of DCs (Winter, 2003), which are associated with the ability of organisations to develop new
direct capabilities to address environmental changes. It is also distinct from the so-called ‘relational view’ (Dyer and Singh, 1998) concerning long-term collaboration and benefits provided through the development of collective-held capabilities (Spring and Araujo, 2014).

Two years after Ordanini and Rubera published their research Hartman et al., (2010) explored contractual and relationship capabilities. They claimed that contractual capability refers to the recognition of the contingencies associated with complex performance and their implications for the efficiency and effectiveness of service delivery. An early study by Mayer and Argyres (2004 a; b) states that contractual capabilities are vital in order to write, negotiate, monitor, and enforce contracts. Six years later Vanneste and Puranam (2010, p. 186) suggested, “...learning as enshrined in contracts is an important manifestation of a general phenomenon of learning to manage inter-firm relationship effectively.” However, some scholars claim that organisations can structure such complex contracts and protect the relationships against opportunism by relying upon legal rules, standards, and remedies implied under the law. Furthermore Poppo and Zenger (2002) argue that in real practice on very rare occasions organisations could not draft complete contracts due to the complex nature of the task, asymmetric information and associated cost. Although, Hartmann et al., (2014) suggest that, in such circumstances organisations deploy incomplete contracts with such an element of uncertainties that it makes them unenforceable in their entirety. These contracts are better suited to the changes caused by environmental or endogenous contingencies (ibid).

Hartmann et al., (2014) also depicted relationship capabilities as vital in the process of building interpersonal and inter-organisational trust and fostering learning across organisational boundaries. An early study by Johnson et al., (2004) refers to relationship capabilities as complex routines, procedures and policies in inter-organisational relationships. Initially, Dyer and Singh (1998) stressed the importance of investing in relationships – specific assets, knowledge exchange, combining complimentary but scarce resources and effectively governing their relationship. Hartmann et al., (2010; 2014), in accordance with Carey et al., (2011) view asserts that contractual governance mechanisms such as monitoring and controlling systems are complimented by relational mechanisms such as trust and cognitive alignment to promote problem solving and knowledge exchange. They further argue that limited research has investigated capabilities in the procurement context. In light of the literature observed so far, the researcher argues that there is no indication that contractual capabilities and relationship capabilities are high-order capabilities sharing common themes of
DCs related to procurement activities or otherwise. Nonetheless, this has been identified from other scholars suggesting that the distinction between types of capabilities remains poorly integrated (Easterby-Smith et al., 2009; Pavlou and El Sawy, 2011; and Teece, 2007).

Another study by Spring and Araujo (2014) reconsiders the way complexity has been treated in the procuring complex performance (PCP) literature and develops an extended discussion of the notion of indirect capabilities. Thy claimed that indirect capabilities - the ability to access other organisation’s capability - are an important part of organisations strategy in procuring complex performance. Their findings identified six inter-related elements to indirect capabilities: IT infrastructure; boundary management practice; contracting; interface artefacts; valuing others’ capabilities and relating directly to indirect capabilities.

Most recently Flynn and Davis (2016) examined the role that tendering, relational, and procedural capabilities play in the context of SMEs in public contract competitions. Their findings supports a capability - based perspective making an explicit statement that procedural and relational capabilities have an significant effect on the contract win - ratio and percentage of total revenue derived from public contracts. Although, procedural capabilities has significant effects on the number of tenders submitted and the value of contract sought, a relational capabilities does not. The importance of tendering skills and the development of a buyer strategy have been underlined. However, these studies enlighten elements of procurement capabilities in their own rights but none of them refers to DCs. Following the above discussion of strategic procurement in public sector organisations the main research question to be addressed is:

“How public-sector organisations use DCs in strategic conversion processes?”

The ‘strategic conversion’ terminology is derived from strategic management field and used in the same context. This has been defined by Mintzberg (1994) as “… a technique of transformation…”

1.2 Research Focus: The Case of the Six Welsh Local Authorities

This thesis investigates DCs in public sector procurement with a focus on six out of 22 Welsh Local Authorities (WLAS) and the National Procurement Service (NPS) as an overarching
body to understand how LAs use DCs in the strategic conversion processes. The public sector procurement environment is complex and multistructured, consisting of different sub-units with their own path - dependencies and rigidities. The sub-units have their own goals, functions, assets, routines, and capabilities forming its specific micro-context, upon which the DCs are built/buy to meet their desirable goals. This means that LAs not only differ in their DCs, their sub-units, with their own paths, culture, leadership, and functions, but also differ in their capability to sense the environment, to seize opportunities, and to continuously transform the procurement function by reconfiguring their tangible and intangible assets.

The NPS for Wales was launched in November 2013 and is hosted by the Welsh Government, employing 40 procurement professionals and collaborating with 73 organisations in Wales including local authorities, the NHS, Welsh Government and Welsh Government Sponsored bodies, Blue Lights, and Higher and Further Education (NPS, 2014). It has been established to work on behalf of the wider public sector across Wales. By using this combined purchasing power of over £1 billion, representing 20%-30% of the Welsh annual expenditure. The goal is to secure annual savings of £25 million.

The six WLAs and NPS represent a very interesting composition to determine the effect that dynamic capabilities abilities have to address strategic changes in a rapidly changing environment. They are all exposed to similar environment pressures and EU directives however, they address changes on both levels using different processes. Therefore, for the purpose of this thesis they signify an interesting composition to investigate the DCs embedded in their managerial and organisational processes. Another fact that makes such a composition interesting is their experience and leadership. i.e. NPS was established in 2012 and is responsible for buying goods and services on a national level to achieve enhanced effectiveness for public procurement by achieving good value for money. It is a relatively new procurement organisation that has a lot to prove, having a political will behind it. On the other hand, LAs, which have a longer history, are undergoing restructuring and continually change.

1.3 Aim and objectives

1.3.1 Aim

The aim of this study was to “investigate DCs in strategic procurement in order to critically assess how Welsh Local Authorities use DCs in strategic conversion process”.
1.3.2 Objectives

The aim was underpinned by six Objectives:

1. To develop a conceptual understanding of DCs and approaches to public sector procurement bringing together two contrasting domains; DCs and public sector procurement.
2. To identify case studies reflecting elements of a strategic approach towards procurement.
3. To investigate how WLAs scan the internal and external environment to spot opportunities and make decision about strategic direction - understanding sensing activities in public sector procurement.
4. To explore their strategic approach to building ecosystem readiness to capture those opportunities- identifying seizing activities.
5. To understand how WLAs continuing to transform their services delivering ‘more with less’ - identifying transformation capabilities.
6. To build a typology of DCs relevant to public sector procurement.

1.5 Scope of the thesis

Although, WLAs are obliged to provide a range of statutory services: social care, transport, housing etc. Spending more than 3.3 billion through procurement in 2015-16 (Wales Audit Office, 2017), over half of the total procurement spend by public bodies that are often subject of strategic reviews, they have not been examined with a view to establish the utilisation of the high order capabilities known as ‘Dynamic Capabilities’ and their strategic conversion within the procurement function. This thesis concentrates on the procurement capabilities and does not specifically address any of the principles governing public procurement that are set out in a range of the EU and UK legislation.

1.6 Overview of the study

This thesis is organised into six chapters, starting with the literature review and theoretical underpinning, and the conceptual framework and research questions emerging from that literature review (Chapter 2: Literature Review), the research methodology (Chapter 3: Research Methodology and Research Design), data presentation and analysis using thematic analysis of primary data and content analysis for secondary data (Chapter 4: Findings), and
evaluation and contribution (Chapter 5: Evaluation & Chapter 6: Conclusion). The overview of the thesis is further explained below.

1.6.1 Chapter One: Introduction

This chapter is designed to overview the purpose, background, and objectives of the thesis, together with the proposed methodology and the testing techniques. The introductory chapter unpacks the theories and assumptions that underpin the research.

1.6.2 Chapter Two: Literature Review

The chapter will examine existing knowledge, drawing on three main areas of research: Dynamic Capabilities, Public Service Procurement and Performance Enhancement. The chapter is concerned with elaborating the research problem on the basis of the main gaps identified in the literature, which will feed into the development of the research questions and conceptual framework. The conceptual framework is concerned with presenting the detailed development of the conceptual framework, drawing on the various definitions of institutional boundaries in the literature review with particular focus on three clusters of DCs: sensing, seizing and transforming (Teece, 2007) within strategic procurement approaches.

1.6.3 Chapter Three: Research Methodology

This chapter presents the methodology of the study, outlining the philosophical perspective and the basis for this research, which ultimately shape and dictate the methods employed in this study. Additionally, this chapter justifies the decision in regard to the research methods, data collection and data analyses techniques. Building on the conceptualisation of movement outcomes presented in Chapter Three, this enables the author to develop unbiased, systematic procedures for testing the validity of the proposed methodology.

1.6.4 Chapter Four: Findings

The chapter presents the qualitative data analysis. The principles and use of the analytical techniques: thematic analysis (primary data), and the content analysis (secondary data). The analysis is structured according to the three themes identified within dynamic capabilities theory presenting an emergent element and the typology of dynamic capabilities in public procurement that is not reflected within the DCs framework developed by Teece (2007).
1.6.5 Chapter Five: Evaluation

This chapter seeks to critically evaluate the presented research findings back to the core literature review and research gap. The chapter in particular highlights the key themes that emerged contextualising DC in a public sector procurement context.

1.6.6 Chapter Six: Conclusion

The final chapter summarises, in an unbiased manner, the findings of the research, reflecting back to the research objectives defined in Chapter One. The chapter provides a comprehensive view on the key conceptual and theoretical contributions to the body of knowledge, followed by the empirical and practice contribution to public sector procurement, as well as eliciting key implications for DCs framework adaption and strategic procurement. Finally, this chapter concludes with the number of suggestions for further research.
2.1 INTRODUCTION

The purpose of this chapter is to demonstrate awareness of the current state of knowledge in the field of dynamic capabilities (DCs) and public-sector procurement (PSP) invigorating the researcher’s understanding of the current state of knowledge (Easterby-Smith et al., 2015) informing and providing the foundation for this thesis. Rowley and Slack, (2014) asserted that researchers need to be informed by existing knowledge in the subject area. A literature review “... is an analytical summary of the existing body of the research in the light of a particular issue.” (Ibid, p. 13). Alternatively, Randolph (2009) claims that a literature review provides a framework for relating new findings to previous findings.

The aim of the study is to:

“Investigate dynamic capabilities in strategic procurement activities in order to understand how Welsh Local Authorities use dynamic capabilities in strategic conversion process”

To create the solid foundation and achieve the aim three key stands of literature consulted for this research are the DCs literature, public sector strategic procurement literature and performance. The chapter thoroughly reviews the concept of DCs, with particular focus on the microfoundations of DCs (Teece, 2007). The process of the literature review begins by evaluating key theoretical perspectives (Teece et al., 1997; Eisenhardt and Martin, 2002; and Helfat et al., 2007), concepts and ideas making an explicit statement that this thesis draws upon Teece’s model (2007) applying the “microfoundation” of DCs within the context of public procurement. This approach enables the researcher to extend the concept into the public sector with the intention to create a typology of public procurement for DCs. The conceptual framework is summarized in section 2.3 and informs the Central Research Question (CRQ) and Supporting Research Questions (SRQ). The themes covered address the aim and the research questions of the thesis focusing on the interpretation of DCs in both the private and public sectors. Table 4 indicates the structure of the literature review chapter.
**Table 4: The Structure of the Literature Review**

<table>
<thead>
<tr>
<th>Parts</th>
<th>Concepts</th>
<th>Focus</th>
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<tbody>
<tr>
<td><strong>Part One</strong></td>
<td>- Dynamic Capabilities</td>
<td>- The nature of Microfoundations</td>
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<tr>
<td></td>
<td>o Conceptual development &amp; Definitions</td>
<td>o Sensing</td>
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<td></td>
<td>o Dynamic Capabilities vs. Ordinary capabilities</td>
<td>o Seizing</td>
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<td></td>
<td>o Dominant scholars</td>
<td>o Transforming</td>
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<td></td>
<td>o Dynamic capabilities in context: private and public sector</td>
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<tr>
<td></td>
<td>o Knowledge gap</td>
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<tr>
<td><strong>Part Two</strong></td>
<td>- Public Sector Procurement and its strategic approaches</td>
<td>- Strategic approaches and activities</td>
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<tr>
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<td>that required higher order capabilities</td>
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<tr>
<td><strong>Part Three</strong></td>
<td>- Conceptual framework</td>
<td>- DCs: Sensing, Seizing, and Transforming</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Strategic Procurement Approach</td>
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2.1.1 The Literature Review Approach

Randolph (2009) claims that defining the scope of the literature review is a critical step, too broad and focus may be lost but too narrow and it may not be possible to fully contextualise the problem within the discipline. This chapter reflects elements of the three types of the literature review suggested by Jesson *et al.*, (2011); *First*, a traditional literature review adapting a critical approach assessing theories in both fields; DCs and strategic procurement. *Second*, a state-of-the-art review bringing readers up to date on the most recent research on DCs and strategic procurement. *Third*, a conceptual review synthesising the areas of conceptual knowledge enabling better understanding of the issues. This sets the broad context of the study, clearly demarcates what is and what is not within the scope of the investigation and justifies those decisions. This approach enables the researcher not only to summarise the existing literature but also to synthesize it in a way that permits a new perspective demonstrating an awareness of the current state of knowledge. This means that the research is not done in a vacuum (Jankowicz, 2005) but interrelates the key issues, concepts, theories, and methodologies that define the fields of the study (Easterby-Smith *et al.*, 2015).
Alternatively, an early study by Cooper (1988) developed a “Taxonomy of Literature Reviews” that suggests four literature review approaches that assist the researcher with defining the scoping process as outlined below:

1. **Exhaustive Review**: To locate and consider every piece of research on a certain topic.
2. **Exhaustive Review with Selective Citation**: The population of the exhaustive review is limited so the number of articles to review is manageable.
3. **Representative Sample**: To consider a representative sample of articles and make inferences about the entire population of articles from the sample.
4. **Purposive Sample**: Examine only the pivotal articles in the field.

Coopers’ taxonomy fits partly to this research since a “purposive” strategy has been employed enabling the researcher to clearly define the research problem and develop the Central Research Question (CRQ) by positioning the study within its discipline and broader theoretical domains whilst also demonstrating command of the relevant literature (Cooper, 1988). The “purposive” strategy was the starting point only. The relevant literature in both topics; DCs and strategic public sector procurement was reviewed, reference lists were interrogated to determine which of those were deemed relevant, these were found, the reference lists were examined, and the process was repeated until a point of saturation was reached, and no new literature came to light; thus, ensuring appropriate coverage of the relevant materials (Randolph, 2009). It is key to convince the reader that the selected literature is central or pivotal to the field, and just as importantly that those not chosen are not central or pivotal (ibid). The approach to literature review have been focus of the research for while. Chicksand et al., (2012, p. 468) detected a lack of ‘clear research norms’ emphasising the need for a comprehensive approach.

### 2.1.2 Rational for methods underpinning the review and literature selection

Several scholars in the DC field have used the literature review method to investigate the DCs concept in both a private and public-sector context (Eisenhardt and Martin, 2000; Zahra et al., 2006; Wang and Ahmed, 2007; Ambrosini and Bowman, 2009; Di Stefano et al., 2010; Klein et al., 2010; Vogel and Guttel, 2013; Peteraf et al., 2013; Piening, 2013) using different methodological approaches to literature review. The review undertaken by Wang and Ahmed (2007) followed the same approach as Zahra et al., (2006) including a list of ‘selected’ empirical literature, but the authors do not specify on what basis these articles were selected. Like the thematic approach, the selective approach relies upon the researcher to make certain inferences in terms of their selection. Ambrosini and Bowman (2009) made explicit their
thematic approach to their literature review. Tranfield et al., (2003); Saunders et al., (2012); Easterby-Smith et al., (2015) argue that the systematic review, lie[s] at the heart of management research, as it aims to serve both academic and practitioner communities. The approach differs from thematic or narrative reviews by adopting a ‘replicable, scientific and transparent process’ (ibid). They include: an explicit presentation of the aims of the review; a comprehensive search of the literature with an explanation of the search methods used; an evaluation of the findings of each work; and a synthesis of those studies into a framework.

However, the method is criticised for being an inherently subjective approach, since it leaves the researcher to ‘make inferences about the entire population from that sample’ (Randolph, 2009, p.4). Pablo et al., (2007), Klein et al., (2010), and Piening (2013), also acknowledged the limitation of the literature in DCs in the public sector context. Therefore, to get some insights into what DCs are and their role, they scrutinised and synthesised the existing literature in a private sector context where DCs have become a prevalent conceptual framework (Eisenhardt and Martin, 2000; Zahra et al., 2006; Wang and Ahmed, 2007; Ambrosini and Bowman, 2009; Di Stefano et al., 2010; Vogel and Guttel, 2013; Peteraf et al., 2013).

Piening (2013) used a similar method narrowing the scope of his study down to seventeen articles, although, the rationale for using systematic review or methods of selection remain vague. A systematic review is also suited to this objective, since it enables researchers to demonstrate that they have adopted a suitable starting point for the research. Barreto (2010) conducts his review of the DCs literature using elements of a systematic approach. His search criteria are replicable and transparent. Barreto searches within a specified set of ‘leading management articles’ between 1997 and 2007, for articles with the terms ‘dynamic capability’ or ‘dynamic capabilities” in their title or abstract. This replicable search generates what he considers to be ‘the key conceptual and empirical articles on dynamic capabilities’ in order to move on to an “an assessment of these research efforts ... and a corresponding body of suggestions for future research” (ibid, p.258). Barreto’s approach sets clear markers in the sand which “provide a framework for relating new findings to previous findings” (Randolph, 2009). This highlights the importance of a robust process of selection focusing upon reputable academic journals of good quality, which are subject to the rigours of peer review. In addition, the breadth and volume of articles written on dynamic capabilities renders an exhaustively ‘comprehensive’ systematic review of the topic an impractical challenge for Barreto or any other researcher working alone.
Alternatively, Di Stefano et al., (2010) use co-citation analysis to explore the structure of the DCs research domain identifying those wider academic domains in which DCs are most vigorously discussed. But, because the DCs concept is theoretically under-developed, their exploration of the ‘intellectual core’ fragments falls into what one would describe as an unbounded intellectual landscape. Similarly, the use of bibliometric methods by Vogel and Guttel (2013, p.429) serves to identify a portfolio of ‘current trends and future priorities’ in the research, rather than an integrated conceptualisation. Similarly, Peteraf et al., (2013) used co-citation analysis to critically evaluate seminal scholars, Teece et al., (1997) and Eisenhardt and Martin (2000) who present contradictory view of the construct elements of DCs. They begin by contrasting a historiography to illustrate the dual influence of two seminal papers on scholarship concerning DCs enlightening the alternative approaches to the literature review process.

However, for the purpose of the literature review chapter the researcher adopts elements of the systematic review following Barreto’s (2010) approach in establishing the search criteria and these principles render the review replicable and transparent. In terms of the range of academic sources, the researcher builds upon the foundations of Barreto (2010), Di Stefano et al., (2010) (private sector) and Piening (2013) (public sector) by bringing their selected articles into the scope of the researcher’s review. In addition, this literature review further extends the chronological range of previous reviews (by bringing into scope relevant articles in the same journals written in subsequent years up to June 2017). This review also extends the range of sources, by searching a database with a broader coverage than that used by Barreto (2010) and Piening (2013). This enabled an exploration of the fullest possible breadth of coverage of the topic, subject to the practical constraints of time and resources imposed upon a solo researcher.

2.1.3 The searching criteria

In order to establish robust search criteria, this research followed Barreto’s (2010) approach of aiming to provide a review of the key conceptual and empirical articles in DCs published in leading management journals. It was found the underlying rationale for his choice of search parameters to be compatible with the approach taken for this study. Using the ABI/Inform database Barreto (2010) identified 1,534 articles which referred to dynamic DCs between 1997 and 2007. These articles embraced not just strategic management but ‘most of the main areas of business administration’ (Barreto, 2010, p.257). Although, his parameters bring into the
scope a broad set of ‘top-tier management journals’, not limited to those with a strategic management focus. By scrutinising this wider body of research, Barreto explored a wide range of management research perspectives, which might offer a contribution to the concept’s theoretical development. Barreto (2010, p. 265) presented a ‘summary of selected research on dynamic capabilities (1997-2008)’ showing why the approach is not yet a theory and suggesting future research to achieve the maturity of the theoretical development. This justifies why the researcher has made reference to his search criteria.

Alternatively, Di Stefano et al. (2010, p. 1192) on their bibliographic review used co-citation analysis to explore the structure of the DCs research domain, to better understand its origins, the current state of theoretical development and possible future directions. They provided evidence on ‘the intellectual core of dynamic capabilities’. They based their analysis on the Social Science Citation Index (SSCI) extracting forty of the most cited articles published in management journals from the Thomson ISI Science Watch database, from 1990-2007, which had the phrases “dynamic capability” or “dynamic capabilities” in the title, abstract or key words sections. Thirty two of these articles are theory-driven and eight are empirical studies. The use of co-citation in their search method brings into play ideas from linked domains of study across the ‘breadth of the research community’ encompassed by the topic of DCs. Di Stefano et al., (2010) provided a wide spectrum of the concept using the most cited articles which provides a good platform for the study since it refers to ‘1700 leading scholarly social sciences journals in more than 50 disciplines’ (Di Stefano et al., 2010, p.1190).

However, the focus of this study is public sector therefore, the researcher’s intention was to refer also to studies that view DCs in a public sector context to get insights of its approach. In this context, the researcher referred to several studies i.e. Klein et al., (2010) and Piening (2013) but insights on the searching criteria were not provided. However, Piening’s study was significant since it provide a broad spectrum of the research particularly drawing upon seventeen empirical research papers on DCs in the public sector, of which thirteen are focused on microfoundations of DCs providing a significant foundation for this thesis. The researcher referred to the reference list of both studies to get an outline of a public sector database or journal (i.e. International Journal of Public Sector, Performance Management etc.).

In light of the above approaches the review started using sources shown in table 5. The Business Source Complete database provided by EBSCO contain thousands of journals including public
sector journals. The database is comparable to the ABI/INFORM database (Barreto’s choice). In fact, a comparative evaluation of ABI/INFORM and Business Source Complete databases calculated that they had indexed 4331 and 4345 journals respectively (Nolan, 2009). However, Nolan also reviews the ‘Journal Citation Report’ to determine the top twenty five journals in business, finance and management.

In terms of these better-ranked journals, Nolan found the Business Source Complete holdings to be more extensive, at twenty versus sixteen, in some cases with a shorter embargo period. Nolan concludes that ‘among these top tier business, finance, and management journals, Business Source Complete has superior holdings and full-text access over ABI/Inform’ (ibid).

Although these sources have been accessed in numerous ways, the library catalogue at University of South Wales was the primary gateway to the literature. The library catalogue was accessed via Findit. This is a search engine that contains all the relevant resources; USW eBooks collection, all eJournals, conference proceedings etc. The search started by identifying those scholarly works that mentioned DCs anywhere in the document text, from 1994 where the notion of DCs was introduced to the most recent work in the field 2017. The search indicated a significant increase in the number of publications since Barreto’s study. The researcher found 3,223 articles (2,033 in peer-reviewed journals) published in leading journals on both the private and public sectors such: Academy of Management Journal, Academy of Management Review, Administrative Science Quarterly, British Journal of Management, Journal of Management, Journal of Management Studies, Management Science, Organisation Science, and Strategic Management Journal. Industrial and Corporate Change, Strategic Organisation, and Academy of Management Perspective.

All of these journals feature in the ABI/INFORM and Business Source Complete database, except for the Academy of Management Journal. The researcher therefore searched this journal separately using previously defined date and search parameters. The journals were all therefore within the scope of the search parameters conducting a fuller supplementary search, the details of which are described below.
<table>
<thead>
<tr>
<th>Source</th>
<th>Description</th>
<th>List of Relevant Journals</th>
</tr>
</thead>
</table>
| **Databases**| **ABI/INFORM**: is a comprehensive business database containing thousands of journal articles, business news and reports on public sector research.  
https://www.galileo.usg.edu/scholar/databases/zuca/  

Business Source Complete | **EBSCO**: With premium full-text content and peer-reviewed business journals, this database is an essential tool for business students. It covers all disciplines of business, including marketing, management, accounting, banking, finance and more.  
| **Google Scholar** | Google Scholar is a freely accessible web search engine that indexes the full text or metadata of scholarly literature across an array of publishing formats and disciplines  
https://tinyurl.com/y8rsnm5q |                                                                                                                                                                                                                              |
| **Library**   | University of South Wales library catalogue:  
http://studentlibrary.southwales.ac.uk/catalogues/  
Findit:  
http://studentlibrary.southwales.ac.uk/findit/  
The gateway to library resources such books, full-text journal articles, news articles, conference proceedings and most of the content of the USW online databases via one search box. |                                                                                                                                                                                                                              |
The researcher agrees with Barreto’s (2010) logic of widening coverage beyond those journals purely interested in strategic management and Di Stefano et al.’s (2010) logic of widening the coverage beyond the immediate research domain of DCs in the private sector. In addition, because of the relative immaturity of the concept, empirical research is only now beginning to emerge. The choice of Business Source Complete database reduced the pool of papers under consideration, bringing into scope articles which had the phrases “dynamic capability” or “dynamic capabilities” in the title, abstract or key words sections, but which featured in other journal titles, which were given grade 3 or 4 by the Association of Business Schools.


A combination of these sources, supported by appropriate key words, outlined in Table 6, ensured the identification and collation of relevant literature was effective in meeting the objective of situating this study within the broader literature and validated the need for this work (Pablo et al., 2007). These journals publish a diverse range of theoretical, methodological and substantive debates as well as practical developments in the field of DCs and public procurement worldwide. All three categories of the journal encourage attention to the development of both concepts; DCs concept and public procurement that are the key focus of this study.

The researcher used the following criteria for evaluating sources of information suggested by Easterby-Smith et al., 2015, p.15):
**Purpose:** what is the purpose of the source? What are the motivations or interest that lead to its creation?

**Authorship:** who is responsible for the source? Are the authors/producers authoritative on this subject?

**Credibility and accuracy:** why is this credible information? Do the authors give enough information so that their claim and methods can be evaluated? Has this information mentioned in peer-reviewed sources?

### 2.1.4 Literature Review Keyword Glossary

Appropriate key words are the foundation of an effective search but the selection process is complex, time consuming and needs considerable thought (Gray, 2014; Easterby Smith, *et al.*, 2015). Consequently, the keyword lexicon was continuously monitored and revised to ensure its appropriateness throughout this study (Bell, 2010).

<table>
<thead>
<tr>
<th>Table 6: Key Word Glossary</th>
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<tbody>
<tr>
<td>1. Dynamic Capabilities</td>
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<tr>
<td>2. Ordinary Capabilities</td>
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<tr>
<td>3. Dynamic Capabilities in the Private Sector</td>
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<tr>
<td>4. Dynamic Capabilities in the Public Sector</td>
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<tr>
<td>5. Microfoundations of Dynamic Capabilities</td>
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<tr>
<td>6. Three Clusters of Dynamic Capabilities: Sensing, Seizing, Transforming</td>
</tr>
<tr>
<td>7. Dynamic Capabilities in a procurement context</td>
</tr>
<tr>
<td>8. Strategic Procurement in a public sector context</td>
</tr>
<tr>
<td>9. Dynamic Capabilities in strategic public-sector procurement</td>
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</table>

Table 6 outlines the key word glossary used to identify relevant and reliable sources. For the purpose of this study 146 articles have been selected. These articles were selected based on the criteria discussed above. These articles have been divided in two main categories 116 on DCs (84 articles view DCs in private sector context and 32 in public sector) and 30 in strategic procurement in a private and public-sector context.

### 2.1.5 Synopsis and Logic of the chapter

Given the aim outlined above, the structure of the chapter is set out in three sections: Section 2.2: focus on the conceptualisation of the DCs concept. This part starts with a broad discussion of the theoretical foundation drawing out the pedigree of the DCs concept. This inductive
approach enables the researcher to have in-depth understanding of what DCs are. This has been considered as an efficient tactic to achieve objectives 1 enhancing the understanding of the chronological conceptual development and the impacts of its origin in this development. This demonstrates awareness of the wide range of alternative theories in the strategic management universal such as Resource-Based-View (RBV) that are considered but not pursued in this study. Furthermore, this part critically evaluates three clusters of DCs: sensing, seizing and transforming. This enable the researcher also to have a better understanding of microfoundations and enhances knowledge about how organisations potentially use DCs in terms of the strategic conversion process that is relevant to research objectives 3, 4, and 5. This will also enable the researcher to understand the state of the art and identify any gaps.

Section 2.3: critically evaluates public-sector procurement strategic activities with particular focus on procurement approaches, with particular focus on Category Management as an emerging theme in strategic procurement context. This section enable the researcher to understand the strategic activities of the public procurement and sense their contribution. This section will enable the researcher to achieve objective 2.

Section 2.4: draws up on the main points discussed in section 2.2 and 2.3 composing a conceptual framework in a logical manner integrating the research elements. This section also defines the Central Research Question (CRQ) and Supportive Research Questions (SRQs) that emerged from the literature review.

2.2 Dynamic capabilities conceptual development

2.2.1 Origins of Dynamic Capabilities

In light of the evolution of the DCs concept Galunic and Eisenhardt (2001) claim that early elements of DCs are found in works by several authors dated well before 1994. Early studies by Schumpeter (1934), Nelson and Winter (1982) and Prahalad and Hamel (1990) have been considered as fundamental to the evolution of DCs terminology. Schumpeter (1934) claimed that the interdependent competitive marketplace was the result of, and the reason for, continuous innovation. Prahalad and Hamel (1990) propose that, in the long run, competitive advantage (CA) stems from building superior core competencies relative to competitors. Alternatively, Barney and Zajac (1994) argue that competition can lead to the development and refinement of valuable capabilities as the organisation learns how to overcome specific challenges. In summary Figure 5 developed by the researcher summarizes fragments from the evolution of the terminology related to DCs from Schumpeter (1934) to Teece (2007).
Figure 5: The Evolution of Dynamic Capabilities Concept. Source: Developed by Author
2.2.2 Intellectual Roots

The DCs literature has its roots in the RBV of the firm (Eriksson, 2014) going all the way back to the work of Penrose (1959). The theory considers organisations with superior systems and structures being profitable not because they engage in strategic aspects (Teece et al., 1997) but because the firm is understood to be a bundle of assets and capabilities (Helfat and Winter, 2011). The theory, reiterates that competitive advantage is gained by way of internal resources and capabilities, which in turn, are utilized to create superior performance (Barney, 1991; Barney and Hesterley, 1996; Liao et al., 2010; Schiele et al., 2012). This is in line also with early studies by Nelson and Winter (1982); Wermerfelt (1984); Barney, (1989a, 1991b); and Connor (1991), which assert that the basis of competitive advantage stems from a firm’s capabilities that meet the criteria of value, rareness, inimitability and novel (VRIN) that are heterogeneous. Barney (2001) states that the RBV logic has been developed by those scholars who are most interested in how the capabilities of a firm change over time, and the sustainable competitive advantage implications of these changes. Successful private sector organisations use these capabilities in a proactive way realising the benefits of their distinctive/unique capabilities to maximize their profit or achieve competitive advantage (Johnson et al., 2005).

Penrose (1959; 1995) also enhanced the significance of knowledge creation and learning across entities. She argued that the firm is a repository of capabilities and knowledge, in which learning is central to the firms’ performance enabling the organisation to develop and deploy resources and competencies effectively. Teece’s (1980) stated that human capital in a firm is usually not entirely ‘specialised’ and can therefore be deployed to allow the firm’s diversification into new products and services. Wermerfelt (1984) and Teece et al., (1997) recognise Penrose’s (1959) contribution to providing insights into how firms access/own resources that are necessary for diversification. They also further support Penrose’s view suggesting that firms are a broad set of resources and that its optimal growth involves a balance between exploitation of existing resources and the development of new ones.

Often the idea of unique resources and capabilities is associated with private – sector firms that are profit orientated, very little emphasis being placed on the public-sector organisations (Matthews and Shulman, 2005; Prajogo et al., 2012). However, Matthew’s and Shulman’s, (2000) findings indicate that the notion of competitive advantage based on distinct/unique
competencies have some resonance with public sector organisations. This reiterates the proclamation of RBV theory that limitations on resources or capabilities are equally applicable to any type of an organisation in the private or public sectors. However, the emphasis should lie on the management process that potentially leads to sustainable long-term competitive advantage (Priem et al., 2012).

Subsequently, Eisenhardt and Martin (2000); Priem and Butler (2000a, 2000b); Holcomb and Hitt (2007); Teece (2007); and Easterby-Smith et al., (2009) assert that the proposition of RBV theory in a highly dynamic and complex environment is questionable since it is static in nature and neglects the influence of environmental dynamism. Unlike DCs, which shape and are underpinned by VRIN resources RBV does not specifically address how future valuable resources or the current stock of VRIN could be created, renewed or transformed to address a rapidly changing environment (Teece et al., 1997; Makadok, 2001; Ambrosini and Bowman, 2009; Teece 2014).

Barney (2001) however, argues that DCs and RBV shares similar assumptions and helps us to understand how the firms’ resource stock evolves over time and how CA is sustained. The value of RBV theory has been questioned from time to time because of environmental dynamics (Zollo and Winter, 2002; Helfat et al., 2007). In this context Priem and Butler, (2001a) state that the RBV theory only explains how profit accrues to a firm in an equilibrium or sustainable environment. D’Aveni and Ravenscraft, (1994) and Eisenhardt and Martin (2000) share similar views since RBV has been criticised for being static and its ability to sustain CA in a complex environment unlikely. Another limitation of RBV is that unlike DCs, it is unable to explain competitive advantage in a dynamic environment (Zollo and Winter, 2002; Helfat et al., 2007). In this respect, DCs draw heavily on early contingency theory arguments that emphasise the importance of firms developing capabilities that are appropriate for any given environment (Salancik and Pfeffer, 2003). Environmental dynamism is at the core of DCs (Wang and Ahmed, 2007). In such environmental conditions, DCs imply that a firm can perform an activity in a reliable and satisfactory way (Helfat and Winter, 2011). Furthermore, several studies i.e. Mosakowski and McKelvey (1997); Williamson (1999); and Priem and Butler (2001a, b) claim that RBV fails to explain mechanisms that transform resource based assets into an organisations CA. In contrast, within a DCs context CA comes through leveraging managerial and organisational processes and is shaped by the strategic positioning of a firm’s assets and the recognition of alternatives to exploit available paths.
Controversially, Wang and Ahmed (2009) state that to some extent the concept of DC compliments the original proposition of RBV referring to VRIN resources. They argue that the associated terminology; resource, processes, capabilities and core competencies, lack clear definition. The research on RBV all adapt and paraphrase Barney’s (1991, p. 101) view on a firm’s resources “...assets, capabilities, organisational processes, firms’ attributes, formation, knowledge...” controlled and managed by the firm to enhance efficiency and effectiveness. Nonetheless, the RBV poses a further issue for writers on DCs when the debate turns to an older theoretical challenge of accommodating the conflicting demands of the philosophies of change and stability. Teece et al. (1997) identify the need to pursue ‘innovative’ dynamic strategies whilst taking into account the relatively static, potentially constraining nature of the firm’s ‘paths’ and ‘positions’ that have been labelled by Schreyogg and Kliesch-Eberl (2007) as ‘integrative’. Teece and Pisano concede that RBV “lacks a logic of change” (Teece and Pisano, 1994, p. 1118) and “...its lack of attention to how a firms key resources can be renewed when circumstances required it.” (Teece, 2018, p. 365). This observation gives some justification to Schreyogg and Kliesch-Eberl’s rejection of the integrative approach, on the basis that it “builds on two contradictory notions of logic at the same time: reliable replication and continuous change—two dimensions that hardly mix” (Schreyogg and Kliesch-Eberl, 2007, p. 922).

Alternatively, Lockett and Wright (2005, p. 85) argued that Penrose (1959, 1995) considered firms as “...an administrative organisation that are a collection of heterogeneous productive resources that have been historically determined.” The two critical points raised by Penrose (1959, 2009) are; first, the value creation does not come from the possession of the resources but from their in use, and how much value is created depends on how these resources are deployed (how they are combined within the organisation), and second, to grow, firms need continual development and innovation and as a result DCs are essential.

Intellectual links between RBV theory and DCs concept are summarized in Table 7 determining that RBV theory conceptualises the firm as a collection of resources and capabilities comprising types of resources putting emphases on organisational activities (Wernerfelt, 1984; Barney, 1991).
Table 7: Intellectual Links Between Resource-Base-View and Dynamic Capabilities.
Source: Author

<table>
<thead>
<tr>
<th>Theoretical stands</th>
<th>Firms conceptualisation</th>
<th>Competitive strategy</th>
<th>Attributes of resources and competencies</th>
<th>Maintaining competitive advantage</th>
<th>Nature of environment</th>
</tr>
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<tbody>
<tr>
<td><strong>Resource-Based-View</strong>&lt;br&gt;Wernerfelt (1984)&lt;br&gt;Barney (1991)</td>
<td>- A collection of resources and competencies comprising:&lt;br&gt;- Tangible, intangible, and capabilities</td>
<td>- Controlling and exploiting strategic resources that meets VRIN criteria</td>
<td>- Valuable&lt;br&gt;- Rare&lt;br&gt;- Inimitable&lt;br&gt;- Non-substitutable</td>
<td>- Development of intangible assets</td>
<td>- Internal Static</td>
</tr>
<tr>
<td><strong>Dynamic capabilities</strong>&lt;br&gt;Teece et al., (1997)&lt;br&gt;Eisenhardt and Martin (2000)&lt;br&gt;Helfat et al., (2007)</td>
<td>- A system formed by processes, routines, resources comprising:&lt;br&gt;- Organisational and Managerial processes</td>
<td>- Orchestrating capabilities embedded in processes, and continual, reconfiguration of the portfolio of assets</td>
<td>- Valuable&lt;br&gt;- Rare&lt;br&gt;- Inimitable&lt;br&gt;- Non-substitutable</td>
<td>- Continual development of tangible, intangible assets and capabilities through enhancements, combination, protection, and reconfiguration</td>
<td>- Internal and external dynamic</td>
</tr>
</tbody>
</table>

Unlike DCs the firm has been conceptualized as a unified system formed by organisational and managerial processes, routines, and resources (Teece et al., 1997). The above also indicates that both concepts, DCs and RBV, focus on sustaining CA, however, they differ in that RBV claims that firms could maintain CA in a static environment through the development of intangible assets, whereas DCs claim that continual development of tangible, intangible and capabilities through, enhancements, combination, and protection, in reconfiguration enable firms to maintain CA in both an internal and external dynamic environment. Nonetheless, drawing from the literature observed above the following section views DCs theory in lights of procurement considering the claims that the theory is relevant to public sector organisations (Winter, 2002; Butler, 2009; Gurtoo, 2009; Szymaniec-Mlicka, 2014).

However, considering common elements of both DC and RBV and considering the context of the study it would be interesting to explore if RBV had been studied in the context of strategic procurement. Carr and Pearson (2002) drawing upon Hart (1995) investigated RBV in context of SP. Their findings suggest that organisational resources emphasizing the importance of human resources and individual capabilities play a key role in SP performance, stressing the significance of the development and alignment of procurement strategies with corporate
strategy. This is similar to the recent study by Mena et al., (2014) which links organisational resources and capabilities with CA - profitability and growth. However, Carr and Pearson (2002) draw upon Hart’s (1995) study which linked purchasing function to the RBV theory.

Several scholars also claim that the DCs concept draws its tenets from the wisdom of the ‘An Evolutionary Theory of Economic Change’ (Nelson and Winter, 1982) with emphasis in organisational routines and path dependence drivers (Teece et al., 1997; Helfat et al., 2007; Di-Stefano et al., 2014; Helfat and Peteref, 2014). Other studies also suggest that the intellectual heritage of DCs is heavily rooted in Simon’s (1947), Alchian’s (1950) and Cyert and March’s (1963) work giving dynamic capabilities a direct behavioural birthright. Organisational Learning (Leonard-Barton, 1992; Levinthal and March, 1981) and Knowledge Base View Theory (Nonaka, 1991; Kogut and Zander, 1992; Nonaka, 1994; Nonaka and Takeuchi, 1995; Grant, 1996a, 1996b; Leonard –Barton, 1995 ;) considers knowledge as the most strategically significant resource of the firm. Although, Deeds and Decarolis (1999), and Winter and Szulanski (2001) argue that a heterogeneous knowledge base and capabilities among firms are the main determinants of sustainable competitive advantage and superior corporate performance. In addition, the literature also found roots of DCs in Transaction Cost Economics Theory (Williamson, 1985) and Complexity Theory (Brown and Eisenhardt, 1997). This indicates that the concept is based on a multiplicity of theoretical roots that have become a critical focus of the ongoing debate in the field. Di-Stefano et al., (2014) asserts that the multiplicity of intellectual roots of the DCs concept reflect the opposing logics and complexity of theoretical development. Some of these theories will be briefly discussed to enlighten the complexity of that theoretical development debate.

An Evolutionary Theory of Economic Change (Nelson and Winter, 1982) explained the role of path dependence and routine and efficiency approach to performance that is contrasted with the market position approach adopted by Porter (1980). The evolutionary theory approach has been traced by Ambrosini & Bowman (2009) drawing upon Penrose’s (1959) work, claiming that value creation comes not from the possession but the ability to use organisational resources effectively. Helfat et al., (2007) argue that, evolutionary economics underpin much of the logic of DCs, since a firm’s evolution and change is non-random and depends on prior history.

The Transactional Cost Theory (Williamson, 1985) is also linked to DCs in the context of understanding the economic aspects of an organisation. This perspective explains why
companies exist, and why they expand or outsource activities to the external environment, seeing markets and hierarchies as alternative mechanisms for organizing economic activities. Most importantly it helps to understand the forms, functions and effectiveness of inter-organisational strategies (Teece and Pisano, 1987; Hennart, 1988a, 1988b; Habbershon and Willimas, 1999). These authors identified environment uncertainties, opportunism, risks, bounded rationality and core assets as factors that reflect the transaction costs related to the exchange of resources with the external environment. However, Teece (2009) claims that transaction cost theory has limitations since it does not examine how new resources are discovered and accumulated, and how firms learn. Opportunism rather than opportunity is a central focus. The central focus of the transaction cost economics is governance, which is an important element of management. Naturally, the question arises whether good governance is sufficient enough to address strategic change and create value? In this context superior, organisational capabilities require not only good asset selection but also continuous reconfiguration and improvement. Transaction cost theory however, by contrast, is primarily about asset or value protection rather than creation. In the light of transaction cost theory Teece (1986a; 1986b) illustrated the way in which governance issues do come into play in strategic management focusing on complementary assets and whether or not these should be internalized. He suggested that the decision whether to ‘own’ or ‘rent’ complementary assets depends on whether the assets were available in competitive supply.

Intellectual roots also have been found in the Behavioural Theory (Cyert and March, 1963) that Eisenhardt and Martin (2000) used as a foundation to analyses the processes that underpin DCs. The attention to routines, competencies, and path dependence from which it derives, relies heavily on the studies of Simon (1947) and Cyert and March (1963) and gave DCs a direct behavioural birthright. However, they argued that firms develop strategies based on their routines and competencies, and that competition in the products market constitutes an important part. The literature indicates that goals within behaviour theory are pictured as reflecting the demands of political coalitions inside organisations, changing as the composition of coalition changes. The theory treats the demand of strategic stakeholders as a component of the operational goals. However, Teece (2009) argues that unlike DCs behaviour of theory undermines the nature of the problem in terms of the decision-making process. For instance, in behavioural theory the decision - making process takes place in response to a certain problem using standard operating procedures and other existing routines. Cyert and March, (1963) argued that organisations and organisational actors differ in terms of their aspirations,
knowledge, and decisions. Therefore in terms of relevance to dynamic capabilities, the most basic contribution of behavioural theory is the heterogeneity of the firm (Teece, 2007), and a notion of adaption. In this context Witner (2003) used satisfaction and dynamic aspiration levels to suggest an ecological and environmental perspective in which learning is a dynamic capability.

In summary, the literature observed so far indicates that the DCs concept draws on a range of intellectual roots summarised in the Figure 6. This means that understanding these intellectual roots invigorates the knowledge on the evolution of the concept holding relevance for sharpening the aspects of conceptual frameworks that pertain to change and for designing and conducting empirical research in the DCs field.

Figure 6: Intellectual Roots and Theoretical Foundation of Dynamic Capabilities. Source: Developed by Author

The following section provides insight into multiple intellectual links that create a foundation for further discussion. The multiple links with other theories have created confusion, using contradictory assumptions (Arend and Bromiley, 2009). The conceptual discussion is therefore very rich (Eriksson, 2014). The absence of clarity in the theoretical foundation raises concerns since theorists may combine theoretical models in an illogical manner (Bromiley and Fleming, 2002; Bromiley, 2004). Hence the complexity and variety of scholars (i.e. Teece et al., 1997; Eisenhardt and Martin, 2000, and Helfat et al., 2007) symbolise different theoretical underpinnings, making different assumptions, employing different reasoning and reaching
different conclusions (Peteraf et al., 2013) reflecting the lack of a coherent theoretical foundation. Eriksson (2014) claims that the literature on DCs could be more rigorous and more explicit, referring to the work carried out by Schreyogg and Kliesch-Eberl (2007); Arend and Bromiley (2009). Poor understanding of DCs and the lack of measurable model (Eisenhardt and Galunic, 2001; Zahra et al., 2006) makes it difficult to study (Pavlou and El Sawy, 2011).

2.2.3 Conceptualisation of Dynamic Capabilities

Teece and Pisano (1994) and Teece et al., (1997) initiated the concept of DCs as a ‘source of competitive advantage’ distinguishing two key aspects: ‘the shifting character of the environment’ faced by the firm; and the key role of strategic management. Initially, the concept development was fundamentally based on three pillars; ‘processes, positions and paths’ of the firm as its strategic dimensions. Teece and Pisano have considered processes as the way things are done in the firm, or what might be referred to as its ‘routines’, or patterns of current practice and learning’; the positions include ‘current endowment of technology and intellectual property, as well as its customer base and upstream relations with suppliers’. The paths consist of ‘the strategic alternatives available to the firm’ (ibid, p.541). Teece and Pisano (1994) stated that DCs are ‘embedded within the firm’s processes’ (ibid, p.553).

An early definition by Teece et al., (1997, p. 516) depicts DCs as “…the firms’ ability to integrate, build, and reconfigure internal and external competencies to address a rapidly changing environment.” In this definition, the purpose to changing organisational competencies, managerial and organisational processes or pattern that matters are “…to address a rapidly changing environment” (1997, p. 516). This definition however has faced criticism since it fails to explain what constitutes such abilities, what their attributes are, how they can be identified, and where they come from (Easterby-Smith et al., 2009). Although, in this definition organisational competencies symbolize managerial and organisational processes emphasizing “…patterns of current practice and learning…” (Teece et al., 1997, p. 518). This indicates that a firms’ unique assets are integrated giving the organisation an ability to achieve new forms of competitive advantage in a volatile environment.

Controversially, three years later Eisenhardt and Martin (2000, p. 1107) advanced Teece’s et al., original definition embracing what Teece refers to as “shaping the environment” taking a different view regarding the creation of market change, as well as a response to exogenous
change (Helfat et al., 2007). They defined DCs in term of ‘processes’ whose nature varies with the degree of market dynamics taking the form of simple rules or ‘best practice’ (Eisenhardt and Sull, 2001) in a high velocity environment (Eisenhardt, 1989). On the other hand, Teece et al., (1997) used the terminology of ‘rapidly changing environment’ depicting that DCs are a set of specific and identifiable processes such as product development, strategic decision-making, and alliances, representing best practice and exhibiting equifinality. They view dynamic capabilities as organisational and strategic routines, which enable the organisation to achieve new resource configurations as markets emerge, collide, split, and die. Distinctively, this definition stresses two aspects; identifying DCs “...as an organisational processes and market change...” that impacts upon resource configuration (Ambrosini and Bowman 2009, p. 34).

In contrast with Teece’s et al., view Ambrosini and Bowman argue that DCs are not necessary conditions for long–term competitive advantage, but, indirectly enhance a firm’s effectiveness for short-term CA. Nonetheless, findings of empirical studies by (Prieto et al., 2009; and Salvato, 2009) indicate a direct association between DCs and an organisation’s performance. Wang and Ahmed (2007, p. 35), however, argued that, Eisenhardt and Martins’ definition does not lead us to a further understanding of the distinction between DCs and processes since DCs are “not simply processes, but they are embedded in processes.” However, there is a general agreement between influential contributors in DCs literature that DCs in general are processes that change an organisation’s resource-base (Collins, 1994: Helfat, 1997; Eisenhardt and Martin, 2000; Zollo and Winter, 2002; Winter, 2003; Zahra et al., 2006; Wang and Ahmed, 2007; Helfat et al., 2007).

Alternatively, Helfat et al (2007, p. 4) defined DCs as “…the capacity of an organisation to purposefully create, extend or modify its resource based.” This definition captures many critical features of DCs expressing through specific meaning of words such ‘resource base’ of the organisation includes tangible, intangible, and human assets as well as capabilities, which the organisation owns, controls or has access to. Easterby-Smith et al., (2009) described the definition as precise enough to be meaningful, yet broad enough to allow strategic management scholars to learn more about the nature and origins of the concept through future research. The Helfat et al., definition bridges both views Teece et al., (1997) stating that DCs enable the firm to address strategic changes in a volatile environment as well as Eisenhardt and Martin (2000) broader notion that DCs can also be the source of disruptive change. This has been seen as a
progress in consolidating the theoretical principals of DCs (Easterby-Smith et al., 2009). The definition applies to non-profit organisation as well as for-profit organisations since both types of organisation are resource based and both may face or initiate changes.

Nonetheless, Arend and Bromiley (2009) state that this definition attempts to clarify inherent problems with DCs and RBV by defining capabilities and resources broadly and clarifying that only those DCs that meet the VIRN criteria create competitive advantage. They also argued that the definition does not purposefully include a reference to performance or effectiveness.

Controversially, Wang and Ahmed (2007, p. 918) defined DCs as

“... firm’s behavioural orientation to constantly integrate, reconfigure, renew and recreate its resources and capabilities, and most importantly, upgrade and reconstruct its core capabilities in response to the changing environment...”

They argued that DCs are not simply processes but embedded in processes. Processes are often an explicit or modifiable structure and combination of resources and thus can be transferred more easily within the firm or across firms. Capabilities refer to a firm’s capacity to deploy resources, usually in combination, and encapsulate both explicit processes and those tacit elements (such as know-how and leadership) embedded in processes.

Table 8 indicates the conceptualisation issues claimed by Arend and Bromiley (2009) and Pavlou and El Sawy (2011). These ambiguous definitions cause inconsistency of usage since they using a wide range of conceptualizations; i.e. DCs have been depicted as capability (Teece and Pisano, 1994; Teece et al., 1997; Collins, 1994; Zahra, 1999; Zahra and George, 2002), abilities (Teece and Pisano, 1994; Teece et al., 1997; Teece, 2000; Helfat and Raubitschek, 2000; Zahra et al., 2006; Teece 2007), patterns (Zollo and Winter, 2002), strategic routines (Eisenhardt and Martin, 2000; Zott, 2003), behavioural orientation (Wang and Ahmed, 2007), capacity (Teece, 2007; Helfat et al., 2007), and meta processes (Feiler and Teece, 2014). This indicates that a lack of universally accepted definition is potentially the main/biggest source of confusion (Winter, 2003; Zahra et al., 2006; Easterby-Smith et al., 2009; Arend and Bromiley, 2009; Piening, 2013; Teece, 2014). Di Stefano (2009) states that the most influential definitions are those of Teece et al., (1997), Zollo and Winter (2002), and Eisenhardt and Martin (2000). The ambiguous definitions have caused inconsistencies of usage of the concept (Zahra et al., 2006). In this context, the researcher could argue that firms developing and applying different
DCs may get volatile consequences ‘...obtain unexpected results...’ This also results in an ambiguity in terms of measurement and operationalisation. Early work by Winter (1995) claims that vague and elastic terms for new theoretical ideas may offer the advantage of facilitating a more flexible development path. However, a lack of general agreement on a definition of DCs, leads to uncertainty regarding the effects and consequences resulting from the application of DCs.

Nonetheless, several alternative conceptualisations of DCs have provided a large array of distinct definitions synthesized in Table 8. These definitions suggest that DCs are not a spontaneous reaction (Collins, 1994; Teece and Pisano, 1994; Teece et al., 1997; Zahra and George, 2002). They are purposefully constructed (Teece et al., 1997; Teece, 2007; 2014) to help the organisation to build and renew resources and assets that lie both within and beyond it boundaries reconfiguring them as needed to innovate and respond to and address a volatile environment that sustains CA. They are unique and idiosyncratic processes that emerge from path – dependent histories of individual organisations and originated from innovation-based competition (Teece et al., 1997).

To conceptualise the proposed set of DCs this study draws upon Teece (2007; 2014) considering DCs not a capability in the RBV context since it is ‘not a resource’ but are ‘processes that impact up on resources’. DCs are future orientated and are specific in nature. For long-term business success, DCs must be congruent with strategic direction and entrepreneurial activities governing how ordinary capabilities and valuable rare, inimitable, and non-substitutable resources are combined and orchestrated. However, Helfat et al., (2007, p. 4) similarly use the term “resource base” but the logic differs from Teece’s since they consider capabilities as resources because DCs comprise part of the resource base of the organisation. Although, Teece’s view suggests that DCs provide the underpinnings of sustainable competitive advantage of the firm and are in turn supported by VRIN resources and “signature processes” (Gratton and Ghoshal, 2005, p. 50). These processes are defined as “…process that have evolved internally from executives’ values and aspirations...” (Gratton and Ghoshal, 2005, p. 50). Nonetheless, Teece’s view on DCs has been criticised i.e. Early work by Williamson (1999) highlighted the unresolved measurement issues as a main weakness of the DCs concept. Controversially, Arend and Bromiley (2003) commenced on the lack of strong empirical support and the ambiguousness of Helfat and Petraf (2009).
<table>
<thead>
<tr>
<th>Authors</th>
<th>Definition of dynamic capabilities</th>
<th>Direct relation between firms and DCs</th>
<th>Mechanisms</th>
<th>Nature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collins (1994, p. 148)</td>
<td>“…the capability that wins tomorrow is the capability to develop the capability that innovates faster...”</td>
<td>Learning to learn capabilities which goes beyond static organisational capabilities.</td>
<td>Not discussed.</td>
<td>Changeable and complexity of the environment – search for new and innovative forms of competitive advantage (beyond best practice).</td>
</tr>
<tr>
<td>Zahra (1999, p. 40)</td>
<td>“Capabilities that can be used as platforms, from offering new products, goods, and services when change is a norm.”</td>
<td>Not discussed.</td>
<td>Not discussed.</td>
<td>Changeable and complexity of the environment – search for new and innovative forms of competitive advantage (beyond best practice).</td>
</tr>
<tr>
<td>Teece and Pisano (1994)</td>
<td>the ability to change organisational resource based … and strategic routines by which managers alter the resource base of the company involving buy and shed resources, integrate and combine them to generate new strategies for creating value.</td>
<td>Not discussed.</td>
<td>Not discussed.</td>
<td>Changeable and complexity of the environment – search for new and innovative forms of competitive advantage (beyond best practice).</td>
</tr>
<tr>
<td>Teece (2000)</td>
<td>The ability to sense, seize opportunities and transform quickly and proficiently.</td>
<td>Address organisational changes in dynamic environment – sustain itself as markets and technologies changes.</td>
<td>Identification and assessment of an opportunity (sensing) Mobilisation of resources to address an opportunity and capture value by doing so (Seizing) Continued renewal (Transforming).</td>
<td>Changeable and complexity of the environment – search for new and innovative forms of competitive advantage (beyond best practice).</td>
</tr>
<tr>
<td>Helfat and Raubitschek (2000, p. 975)</td>
<td>“The ability of companies to innovate and adapt to changes in technology and markets, including the ability to learn from mistakes.”</td>
<td>Innovation and adaptability – flexibility.</td>
<td>Not discussed.</td>
<td>Changeable and complexity of the environment – search for new and innovative forms of competitive advantage (beyond best practice).</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Quote</td>
<td>Indirect links between DCs and performance. DCs could damage the performance if they will not be used appropriately (i.e. if they use when no required or where wrong-cause assumption has been made).</td>
<td>Learning from experience (relevant to establishes firms) Trial and error and improvisation processes (relevant to new ventures).</td>
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<tr>
<td>Zahra et al., (2006, p. 3)</td>
<td>“…as the abilities to re-configure a firm’s resources and routines in the manner envisioned and deemed appropriate by its principal decision-maker(s).”</td>
<td>DCs are linked to superior performance and survival in changing environment condition.</td>
<td>Learning mechanisms such repeated practice and consequent experiences.</td>
<td></td>
</tr>
<tr>
<td>Zollo and Winter (2002, p. 340)</td>
<td>“…learned and stable pattern of collective activity through which the organisation systematically generates and modifies its operation routines in pursuit of improved effectiveness.”</td>
<td>DCs are necessary but not sufficient conditions for competitive advantage.</td>
<td>Learning mechanisms such repeated practice and consequent experiences.</td>
<td></td>
</tr>
<tr>
<td>Eisenhardt and Martin (2000, p. 1107)</td>
<td>“…organisational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die” (This is an extension of Teece et al., 1997 original definition).</td>
<td>Generate change, although they are highly patterned and costly activity that needs special radical efforts. Cost made DCs not necessary advantageous. The alternative way to generate change though ‘ad hoc problem solving’.</td>
<td>They develop through the evolution of three mechanisms: (1) tactic accumulation, (2) knowledge accumulation and (3) knowledge codification practices.</td>
<td></td>
</tr>
<tr>
<td>Zott (2003)</td>
<td>Routine organisational processes that guide an evolution of firms’ resources and operational routines.</td>
<td>Not direct links to firm’s performance, however, DCs might influence the performance by modifying firms’ resources or routines.</td>
<td>Strategic routines: Strategic flexibility of resources (Adaptive Capabilities) Prior knowledge (Absorptive capabilities) Organizational innovation, market innovation and strategic tendency to pioneer and technology sophistication (Innovative Capabilities - Missing link of transformational mechanisms.</td>
<td></td>
</tr>
<tr>
<td>Winter (2003, p. 991)</td>
<td>“…are those routines that operate to extend, modify or create ordinary capabilities.”</td>
<td>Strategic routines: Strategic flexibility of resources (Adaptive Capabilities) Prior knowledge (Absorptive capabilities) Organizational innovation, market innovation and strategic tendency to pioneer and technology sophistication (Innovative Capabilities - Missing link of transformational mechanisms.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wang and Ahmed (2007, p. 918)</td>
<td>“…a firm’s behaviour orientation constantly to integrate, reconfigure, renew, and recreate its resource and capacities and most importantly, up great and reconfigure its core capabilities in respond to the changing environment...”</td>
<td>The essence of DCs is a ‘firm’s behaviour orientation in the adaption, renewal, reconfiguration, and recreation of resources, capabilities and core capabilities responding to external change’ (2007, p. 43). The relationship between DCs and organizational performance is complex.</td>
<td>Strategic routines: Strategic flexibility of resources (Adaptive Capabilities) Prior knowledge (Absorptive capabilities) Organizational innovation, market innovation and strategic tendency to pioneer and technology sophistication (Innovative Capabilities - Missing link of transformational mechanisms.</td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>Quote</td>
<td>Meta-Processes</td>
<td></td>
<td></td>
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<td>------------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helfat et al. (2007, p.4)</td>
<td>“... a capacity of an organisation to purposefully create, extend, or modify it resource base.”</td>
<td>Not discussed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teece (2007, p. 1319)</td>
<td>“...capacity to ...sense and shape opportunities and threats ...to seize opportunities, and ...to maintain competitive through enhancing, combining, protecting, and, when necessary reconfiguring the business enterprise’s intangible and tangible assets.”</td>
<td>Enhance overall performance. Sensing, seizing and transforming.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teece (2009, p. 87)</td>
<td>“… (Inimitability) capacity business enterprise process to shape, reshape, configure, and reconfigure assets so as to respond to changing technologies and markets...”</td>
<td>Not discussed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feiler and Teece (2014, p. 14)</td>
<td>“... are meta-processes that orchestrates a number of processes, best practices, or competencies to manage comprehensively and systematically, something that is strategically imperative, including the strategy development and execution process itself.”</td>
<td>Innovative and build Meta-processes that enable the orchestration/alignment of strategic activities.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This thesis draws upon Teece (2007) definition that depicted DCs as a capacity. The definition indicates a tripartite taxonomy of ‘sensing’, ‘seizing’, and ‘transforming’ encouraging firms to be engaged in exploration and exploitation of activities requiring the coherent alignment of competencies, structure, and culture. Teece has advanced further the conceptual development of DCs by creating the microfoundations of DCs based fundamentally on the alignment of the:

“... distinct skills, processes, procedures, organisational structures, decision rules, and disciplines— which undergird enterprise-level sensing, seizing, and reconfiguring capacities.” (Teece, 2007, p.1319).

For analytical purposes this thesis places Teece’s (2007) definition in the public-sector procurement context disaggregating procurement capabilities into three groups; sensing, seizing and transforming, which translated in to a public procurement context are defined as;

**Sensing:** an ability of a public organisation to spot procurement opportunities and threats, extending these activities beyond their business ecosystem and embracing a range of potential collaborators such as customers and suppliers.

**Seizing:** activities including the building of new competencies or the implementation of a new business model which responds to specific opportunities (Teece, 2007) i.e. engaging with other stakeholders through strategic sourcing

**Transformation:** is wider in scope and exercised less frequently than seizing. Through reconfiguration of the public sector organisation seeks to retain that organisation’s ‘evolutionary fitness’. It embraces the ability to recombine and to reconfigure assets and organisational structures as the enterprise grows, and as markets change (ibid).

### 2.2.4 Dynamic Capabilities Depicted as Capability

This study, in line with several others i.e. (Teece and Pisano, 1994; Teece et al., 1997; Collins, 1994; Zahra, 1999; Zahra and George, 2002) depicts DCs as capability. Therefore, it is essential to engage in the ongoing debate invigorating understanding of the spectrum of organisational capabilities by raising the three following questions: What are capabilities? What is their role? How have they been perceived in the context of DCs?

Winter (2003, p. 991) defined capabilities in a border concept of organisational routines as a
“...high-level routine (or collection of routines) that together with its implementation input flows, confirms upon organisation’s management a set of decision options for producing significant outputs of particular types.” The main emphasis of the definition is the regulated connotation of routines - behaviour that is learned, highly patterned, or quasi-repetitious founded in part on tacit knowledge. He argues that the strategic substance of capabilities involves the patterning of activity, and that costly investment is required to create or sustain such patterns. Alternatively, Zubac et al., (2010, p. 11) defined capabilities as “...a firm capacity to combine, assess, and deploy its...resources using predetermined activities, routines, processes, systems and skills of its employee” to enhance performance. However, Dosi and Teece (1998, p. 284) defined capabilities as the “...firm’s ability to organize, manage, coordinate, or govern sets of activities”. This indicates that capabilities are broadly viewed as processes and routines by which the firm transforms its resource based into valuable output (Teece et al., 1997).

Penrose (1959) has been recognised as the most influential scholar in the organisational capabilities field (Kor and Mahoney, 2003; Pitelis, 2004). In Penrose’s view each firm is a unique bundle of heterogeneous organisational capabilities; these capabilities are derived from resources, both physical and human. The rapidly changing environment and uncertainties have increased the pace of pressure to build higher order capabilities that enable the organisation to enhance its performance in a dynamic environment (Teece et al., 1997; Teece 2007).

2.2.5 Hierarchy of Capabilities: Dynamic Capabilities Higher Order Capabilities

The strategic management literature indicates several different models that determine the hierarchical architecture of capabilities (Collins, 1994; Winter, 2000, Zollo and Winter, 2002; Andreeva and Chaika, 2006; Pavlou and El Sawy, 2006; Wang and Ahmet, 2007; Danneels, 2008; Ambrosini et al., 2009). An assumption on the hierarchal nature of capabilities was originally initiated by Collins (1994), who proposed three hierarchies of capabilities: static, dynamic and creative capabilities classified in the taxonomy of three-level capabilities: first-order, second-order and higher order. He further explains that first order capabilities reflect an ability to perform the basic functional activities of the firm that are essential for company survival and maintenance of the main business processes (Andreeva and Chaika, 2006). This is in line with Winter’s (2003) zero-order capabilities, an ability to enable the firm to make its living, i.e. these are delivery operations or quality control functions. Wang and Ahmed’s (2007) regard first-order capabilities, as an ability to deploy resources to attain a desired goal. Collins
(1994) depicts second-order capabilities as dynamic improvements to the activities of the firm. Amit and Schoemaker (1993, p. 35) have described second order capabilities as “…repeated processes or product innovations, manufacturing flexibility, responsiveness or market trend, and short development cycles”. This is consistent with the DCs proposed by Teece et al., (1994; 1997) and the higher-order capabilities offered by Helfat et al., (2007) and Winter (2003) that enable firms to change and reconfigure their ordinary capabilities (OCs). Collins recognises these as creative or entrepreneurial capabilities related to a firm’s ability to develop novel strategies faster than any competitors through its unique resources and processes.

Collins (1994) associate DCs with second and third order capabilities pointing out that DCs are different from OCs since they govern their rate of change. Similarly, Wang and Ahmed (2007, p.36) also suggest ‘third-order capabilities’ known as DCs that focus on the renewal, reconfiguration and re-creation of resources, capabilities and core capabilities to address environmental change. Andreeva and Chaika (2006) claim that the Collins taxonomy can serve the discussion of the essence of dynamic capabilities. In Collin’s taxonomy, DCs govern the rate of change of ordinary capabilities therefore they are higher order capability. Collins’s hierarchy of capabilities is summarized in Table 9.

<table>
<thead>
<tr>
<th>Complexity</th>
<th>Level of Capabilities</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Order</td>
<td>Higher-order capabilities</td>
<td>Creative capabilities</td>
</tr>
<tr>
<td>2nd Order</td>
<td>Second-order capabilities (Capabilities related to dynamics)</td>
<td>Dynamic Capability relation: Develop novel strategic processes faster than competitors</td>
</tr>
<tr>
<td>1st Order</td>
<td>First-order capabilities (Functional capabilities)</td>
<td>Dynamic capability relation: RBV - buy or build Focus on dynamic improvement of business processes</td>
</tr>
</tbody>
</table>

In addition, Zollo and Winter (2002) and Winter (2003) focused mainly on first and second order capabilities explaining that in a fast changing unpredictable environment, “…even the higher-order learning approaches will themselves need to be updated repeatedly” (Zollo and Winter, 2002, p. 341). A year later, Winter (2003) defined capabilities as ‘high-level’ routines that are learned, patterned, deliberate, and repeated. He further advanced the idea of hierarchical capabilities starting from operating capabilities or ‘zero-level’ capabilities that enable the firm to do the same thing repeatedly. In this view any change such as a new product
development or diversification involves dynamic capabilities (Teece, 2015). Winter described first-order capability as those that allow for a change in zero–order capabilities to occur, i.e. they effect changes to production processes. Whereas, in Winter’s view ‘higher-order’ capabilities are considered to be an outcome of the organisation’s learning which result in creating and modifying a firm’s DCs. However, similar to Collins (1994) Winter does not discuss high-order capabilities in depth.

Controversially, Danneels (2008) focused on competencies suggesting two types: first-order competencies which constitute the ability to complete an individual task; the second–order competencies which constitute a firm’s ability to achieve renewal of itself through creating new first order competencies focusing on ‘competency to build competency’ (2008, p. 519; 520). He explicitly links abilities with competencies, suggesting that abilities could be ‘conceptualised as second order competences.’ In other words, a second order competence is the ability of the firm to engage in exploration, that is, to ‘build’ new competencies. Developing new competencies that enable the organisation to address a rapidly changing environment is essential. (Penrose, 1959; Helfat, 2000; McGrath, 2001). Ambrosini et al., (2009) make a similar contribution to theory although, they viewed Danneels (2002) first-order capabilities as a being a firm’s extant resource base, the resources that enable the firm to earn a living (Winter, 2003) and his second order capability those that enable the creating of new resources referring to DCs. They criticized Danneels (2002; 2008) for disregarding issues of how DCs themselves might be change.

Alternatively, other studies by Andreva and Chaika (2006) and Wang and Ahmed (2007) discuss a firms’ resources and capacities in a ‘hierarchical’ order referring to DCs as a ‘third order’ element of the hierarchy emphasizing a firm’s constant pursuit capacity to renew, reconfigure, and re-create its resource base, capabilities, and core capabilities to address environment changes. Resources are viewed as a ‘zero-order’ element that could lead to competitive advantage only if they demonstrate VRIO criteria. Wang and Ahmed (2007) argued that the ability of the firm to deploy resources that attain desirable goals is likely to result in performance improvement.

Controversially, Ambrosini et al., (2009) proposed three levels of DCs; Incremental DCs, Renewed DCs, and Regenerative DCs building on the work of Winter (2003), Zahra et al., (2006), and Danneels (2008). Furthermore, Ambrosini et al., (2009, p. 16) analyse three levels
in an analogy with four main DCs; reconfiguration, leveraging, learning and integration (Bowman and Ambrosini, 2013) that are further discussed in section 2.2.1. They argued that where organisation uses only leveraging DCs a regenerative DC would allow it to develop, for instance ‘reconfiguration DCs’ e.g. to develop the ability to identify and integrate appropriate acquisitions. Alternatively, firms might develop ‘integration DCs’ facilitate open culture encouraging collaboration and experimentation and hence facilitating innovation. Therefore, ‘regenerative DCs’ would act to change DCs by either changing the form, for example from leverage to reconfiguration, or alternatively the mix of capabilities—adding leverage to reconfiguration capacities. For instance, a strategic business unit (SBU) may have an extant of DCs of leveraging best practice within its boundaries; but might extend the leveraging processes to encompass other related SBUs in the organisation.

In light of the literature observed so far Table 10 summarizes key points indicating incongruity towards the level of capabilities. Studies by Zollo and Winter (2002); Winter (2000, 2003); Andreva and Chaika (2006); Teece (2007); Wang and Ahmed (2007) associated DCs with higher order capabilities. Although, Collin (1994); Pavlou and Sawy (2006); Danneels (2008); Ambrosini et al., (2009) defined higher order capabilities they did not explicitly associated them with DCs. However, the literature indicates that at the first level they find incremental DCs: those capabilities that are concerned with continued improvement of a firm’s resource base. At the second level are renewing DCs, those that refresh, adapt and augment the resource base. Both levels are usually conceived as ones that represents what the literature refers to as DCs. At the third level are regenerative DCs, which impact not on the firms’ resource base but on its current set of DCs, i.e. these change the way the firm alters its resource base. Ambrosini et al., (2009) explored the three levels using illustrative examples; i.e. incremental: e2v companies’ constant improvement of their waste management and energy use, renewing: Virgin for its brand extension and Sony for process replication. Regeneration: International Greeting and GSK. They concluded that regenerative DCs may either come from inside the firm or enter the firm from outside, via changes in leadership or intervention of external change agents. They also stated that the three levels of DCs, are related to management perceptions of environmental dynamism.

The literature also indicates that the distinction between lower and higher order capabilities is inherent in DCs literature since there is no clear distinction between levels of capabilities in relation either to organisation performance or of effectiveness in a changing environment.
(Danneels, 2008). However, O’Reilly and Tushman (2007) claim that as some firms, albeit not the majority, do survive in the face of change, the question is how they manage to adapt—and why are some firms able to accomplish this while others cannot? Central to the adaptive process are the notions of a firm’s ability to exploit existing assets and positions in a profit producing way and simultaneously to explore new technologies and markets; to configure and reconfigure organisational resources to capture existing as well as new opportunities (March, 1991; Helfat & Raubitschek, 2000; Holmqvist, 2004; Teece, 2006). This capacity has been referred to either as exploration and exploitation (March, 1991) or ambidexterity (Duncan, 1976; O’Reilly and Tushman, 1997).

<table>
<thead>
<tr>
<th>Table 10: Hierarchy of Organisational Capabilities Models</th>
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<tbody>
<tr>
<td>Higher-order capabilities</td>
</tr>
<tr>
<td>Creative capabilities</td>
</tr>
<tr>
<td>Second-order capabilities</td>
</tr>
<tr>
<td>Capabilities related to dynamics</td>
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<tr>
<td>Functional capabilities</td>
</tr>
</tbody>
</table>

Drawing from the above discussion, Collins (1994); Danneels (2002, 2008); Winter (2003); Zahra *et al.*, (2006); Wang and Ahmed, (2007); and Ambrosini and Bowmen (2009) suggest
forth–level hierarchy, that is, discriminating between zero – first, second order capabilities and higher–level capabilities. In this context, the more common usage seems to be equating zero -first and second order with OCs, that is, those that allow the firm to make a living in the short term (Winter, 2003 and Pavlou and El Sawy, 2011), or to ‘substantive capabilities’ that is, those to solve a problem (Zahra et al., 2006). Similarly, Zollo and Winter (2002) distinguished two types of routines: those employed in operational activities so called ‘operating capabilities’ and those dedicated to the modification of the operational routines so called ‘dynamic capabilities’.

An alternative perspective drawn up on Penrose’s theory focuses not only on exploitation by enhancing efficiency, increasing productivity, control, certainty but also on exploration. This being the ability of the organisation to search, discovery, autonomy, innovation and embracing variation. This is known as ‘Ambidexterity’ (Harreld et al., 2006; O’Reilly and Tushman, 2007; 2008; 2011; 2013). They asserts that DCs are at the heart of the ability of the business or the firm to be ambidextrous – to compete in both mature and emerging markets (to explore and exploit). Whilst, Teece (2007) asserts that ambidexterity has been considered as a tailored version of the DCs framework.

O’Reilly and Tushman (2007, p. 2) argue that ambidexterity, is the “ability of a firm to simultaneously explore and exploit, and enables a firm to adapt over time” supporting the viability of an integrative approach, although opinions diverge when it comes to explaining how such integration can be achieved. O’Reilly and Tushman (2007) also elaborate on the potential for pursuing the two paths simultaneously in their ‘ambidextrous organisation’. Makadok (2001) talks of the two aspects as ‘capability-building’ and ‘resource-picking’ and developed a model to support the fact that they can work in combination. Benner and Tushman (2003) describe a similar tension between ‘exploitation’ and ‘exploration’ in their construction of a firm’s ‘productivity dilemma’. These last two papers refer to the conflicting demands to exploit existing opportunities and to explore new avenues of knowledge, thus connecting theory on DCs with theory on organisational learning, as proposed by Mahoney (1995). A study by O’Reilly and Tushman (2008, p. 13) suggest that consistent, with Teece's (2007) taxonomy of sensing, seizing and transforming, ambidexterity requires a coherent alignment of competencies, structures, and culture to engage in ‘exploration’, a contrasting congruent alignment focused on ‘exploitation’, and a senior leadership team with the cognitive and behaviour flexibility to establish and nurture both.
Alternatively, unlike other scholars Carter (2015, p. 795) has developed an alternative idea of a “hierarchy of capabilities in an ambidexterity perspective” building upon Winter’s (2003) view discussing the mechanisms of capabilities. Carter (2015, p. 798) argues that first – order ambidexterity represents dynamic capabilities for strategic and organisational realignment. As shown in Table 11 first-order ambidexterity involves anticipatory and reactive managerial routines for ‘sensing’ when to change, ‘seizing’ on change and ‘reconfiguring’ the firm’s asset base for a new orientation (Teece, 2007). Consistent with Teece’s tripartite taxonomy O’Reilly and Tushman (2008) explained sensing, seizing, and reconfiguring in the light of ambidexterity. Sensing new opportunities involves capabilities for scanning, learning, creating and interpreting new information. Seizing the opportunity requires capabilities to select and manage product architectures, business models and firm boundaries. Reconfiguring puts this all into action. These continuous and routinised activities inhibit organisational inertia and competence traps (Leonard-Barton, 1992). However, Teece (2007) has considered ambidexterity as a tailored version of dynamic capabilities therefore it is not a main focus of the thesis.

<table>
<thead>
<tr>
<th>Types</th>
<th>Focus</th>
<th>Form</th>
<th>Mechanisms and capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero-order</td>
<td>Executing the strategy that involves simultaneous exploration and exploitation (Tushman and O’Reilly, 1996; Gibson and Birkinshaw, 2004)</td>
<td>○ State</td>
<td>○ Structure ○ Context ○ Leadership</td>
</tr>
<tr>
<td>First-order</td>
<td>Dynamically shifting strategic content (i.e. ratio of exploitation and exploration) and the organisational context needed to support any new strategy (O’Reilly and Tushman, 2008)</td>
<td>○ Processes</td>
<td>○ Sensing ○ Seizing ○ Reconfiguring</td>
</tr>
<tr>
<td>Second-order</td>
<td>Dynamically shifting the dominant logic to adapt top management thinking, behaviour, and processes to orchestrate an ambidextrous organisational system</td>
<td>○ Logic</td>
<td>○ Cognitive complexity ○ Behaviour complexity ○ Process complexity</td>
</tr>
</tbody>
</table>

This indicates that there is still an ongoing debate between two opposing concepts since Teece associates DCs with higher order capabilities rather than first order. This disputes the view of O’Reilly and Tushman (2008) since they considered these clusters as a first-order capability. An early study by Teece et al., (1997) asserts that ordinary capabilities and DCs are quite
distinct, both analytically and in practice. Teece (2014) claims that differentiating ordinary capabilities (OC) from DCs sharpens an understanding of the DC concept. Lack of clarity between these two represents another conceptual problem (Easterby-Smith et al., 2009). Therefore, it is an imperative step for researchers investigating this field to define characteristics of OC and DCs (Ambrosini and Bowman, 2009; Barreto, 2010; Pavlou and El Sawy, 201; Teece, 2014) since a firm’s evolution is underpinned by interaction between DCs and OC (Zollo and Witner, 2002; Winter, 2003; Helfat et al., 2007; and Newey and Zahra, 2009).

Although, Helfat and Winter (2011) suggest that scholars need to be careful when studying DCs for three main reasons: (1) the world is always changing to some extent that it is important to assess the extent, nature, and speed of changes that its capabilities enables. Capabilities that promote economically significant change are dynamic, even if the pace of change appears slow and uncritical. This indicates dual-purpose and multiple-variant capabilities that have both ordinary and dynamic purpose, (2) DCs cannot distinguish between OCs based on whether they support what is perceived as radical vs. non-radical change, or new vs. existing business, and (3) one’s perception and biases may determine how much change one observes.

2.2.6 Ordinary Capabilities vs. Dynamic Capabilities

2.2.6.1 Characteristics of Ordinary Capabilities

Ordinary capabilities (OCs) are defined as static (Collins, 1994), zero –level capabilities (Zollo and Winter, 2002) and Winter (2003) and first order (Danneels 2002). They do not take on negative values (Winter, 2003; Helfat et al., 2007) since the value is bounded from below zero (Winter, 2003). OCs involve the performance of administrative, operational, and governance related functions that are technically necessary to accomplish the task (Teece, 2014). They are those capabilities that firms use in their day-to-day operations (Winter, 2003) known as the first level order functional capabilities (Collins, 1994), or ‘how we earn the living now’ (Andreeva and Chaika, 2006, p. 10). They constitute a firm’s ability to execute day-to-day tasks (Pavlou and El Sawy, 2011) and produce outputs of a particular type (Helfat and Peteraf, 2003). They further explained that OCs enable the firm to execute its main operating activities such as making and selling products or delivering services (Winter, 2003, Zahra et al., 2006).
Examples of OC have been acknowledged in the literature. i.e. Newey and Zahra (2009) described product or service development as a key OC within an organisation. They argue that, the paradox of OCs is that, it requires a certain amount of routinisation to qualify as a capability (Dosi et al., 2008). Although, in the face of a rapidly changing environment, such routinisation can potentially become the source of inertia, market irrelevance and eventually failure (Teece et al., 1997). It is unlikely, DCs counter this effect and are generally viewed as the ability of the firm to reconfigure OCs to allow the firm to adapt and evolve (Zollo and Winter, 2002; Helfat et al., 2007; Teece, 2007; Zahra et al., 2006).

Although, Helfat and Winter (2011) equated OCs with those that Winter (2003) describes as zero-level capabilities, doing the same thing repeatedly. However, Teece (2014) finds these descriptions too narrow to encompass the full range of activities, explaining that OCs are embedded in some combination of (1) skilled personnel, including, under certain circumstances, independent contractors, (2) facilities and equipments (3) processes and routines, including any supporting technical manuals, (4) the administrator coordination that is needed to get job done. The measurement against specific tasks, such as labour productivity, inventory turnover, time to completion, and can be benchmarked internally or externally to the industry’s best practice. Teece (2014) describes OCs as best operational practices including those that increase speed, quality, and efficiency and best management practices. Bloom et al., (2012) suggest that the best management practices continuously collect and analysis performance information, set challenging and interlinked short and long run targets, and reward higher performers while retraining/firing low performers.

OCs have been considered strong when an organisation achieves best practice (Teece, 2014). However, it has been argued that best practices alone are generally insufficient to enhance performance and effectiveness (Teece, 2014). This is because much of the knowledge behind ordinary capabilities can be bought through consultants or investment in training (Bloom et al., 2013). Consequently, good and even best practice diffuse with competition rather quickly since they could be imitated. Teece (2014) further argues that, the presence of strong and even differentiated ordinary capabilities does not explain whether the current product schedule is a right and profitable path to follow in the future.
Table 12 represents the main characteristics of the OCs indicating that they are first – order
capabilities (Collin, 1994; Winter, 2003; Danneels, 2002). Zero-first and second typology
(Easterby-Smith and Prieto, 2008; Schilke, 2014).

Table 12: Characteristics of Ordinary Capabilities: Source: Author

<table>
<thead>
<tr>
<th>Authors</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter (2003)</td>
<td>Capabilities that firm’s use in day-to-day operation.</td>
</tr>
<tr>
<td>Helfat and Winter (2011)</td>
<td>OCs are equated with operational capabilities i.e. just in time delivery.</td>
</tr>
<tr>
<td>Pavlou and El Sawy (2011, p. 242) and Winter, 2003, p. 991)</td>
<td>They constitute a “...firm’s ability to execute day-to-day activities.” ’...make a daily living.’</td>
</tr>
<tr>
<td>Helfat and Peteraf (2003)</td>
<td>OCs explain how firms earn their living by producing and selling the same product, on the same scale and to the same customer(s).</td>
</tr>
<tr>
<td>Collins (1994) and Ambrosini and Bowman (2009)</td>
<td>Static –competing today.</td>
</tr>
<tr>
<td>Teece (2014, p. 330)</td>
<td>OCs “involves the performance of administrative, operational, and governance related function that are technically necessary to complete the task.”</td>
</tr>
<tr>
<td>Embedded in combination of skilled personnel, facilities and equipments, processes and routines, and, the administrative coordination needed to get the job done; Doing things right; Efficiency is at the heart of OC.</td>
<td></td>
</tr>
<tr>
<td>Teece (2007; 2014)</td>
<td>Best operational practices: increase speed, quality and efficiency. Strong OCs are considered when the firm has achieve the “Best Practice” OCs permits some degree of sufficiency and excellence. Achieve technical efficiency and ‘doing things right’</td>
</tr>
</tbody>
</table>

MESUREMENT: External fit (Helfat la. 2007) against requirements of specific task, such as labour productivity, inventory, and time to completion. It can be benchmarked internally or externally to industry best practice

Ordinary Capabilities: (Teece’s (2014, p. 7) view

| Purpose | Technical efficiency in business functions |
| Tripartite schema | Operations, administration, and governance |
| Capability –level goal | Best practice |
| Priority | Doing things better |
| Imitability | Relatively imitable |
| Mechanisms of attainability | Buy or build |
| Results | Technical fitness |
They are equated with OCs (Helfat and Winter, 2011) indicating that they constitute a firm’s ability to execute day-to-day activities (Collins, 1994; Winter, 2003; Pavlou and El Sawy 2011) acceptable to earn a living now (Collins, 1994; Winter, 2003; Andreeva and Chaika, 2006; Pavlou and El Sawy, 2011).

Likewise, Helfat and Peteraf (2003); Winter (2003); and Zahra et al., (2006) assert that the main characteristic of OCs is that they explain how firms earn their living by producing and selling the same products, on the same scale and to the same customer. Furthermore, they have been described as static (Collins, 1994; Ambrosini and Bowman, 2009) and substantive (Zahra et al., 2006) that do not take a negative value (Winter, 2003; Helfat et al., 2007).

In summary, the literature indicates that OCs are embedded in some combination of skilled personnel, facilities and equipments, processes and routines, and the administrative coordination needed to get the job done (Teece, 2014). They are associated with best practice (Teece, 2007; Easterby-Smith and Prieto, 2008; Schilke, 2014; Teece 2014) permit some degree of efficiency and excellence in achieving technical efficiency and ‘doing things right’ (Teece, 2007; 2014). The outcomes of OCs - best practice are measured with the performance of a specific task.

**2.2.6.2 Characteristics of Dynamic Capabilities**

Unlike OCs, DCs serve as a catalyst to change a firm’s capabilities, knowledge, and competencies (Kogut and Zander, 1992; Iansiti and Clark, 1994; Zander and Kogut, 1995; Teece et al., 1997), its operational routines (Collis, 1994; Zollo and Winter, 1999), and its resource configurations (Eisenhardt and Martin, 2000; Galunic and Eisenhardt, 2001). Furthermore, DCs craft new business and corporate strategy (Ambrosini and Bowman, 2003), and also encourage innovation that stimulates change (Repenning and Sterman, 2002; Teece, 2007) with significant management involvement (Teece and Pisano, 1994; Teece et al., 1997; Teece et al., 2015). The existing literature indicates various characteristics of DCs summarized in Table 13. Drawing from the above Collins (1994) claims that DCs are a higher order capability that govern the rate of change of OCs. Nelson and Winter (1982), Teece et al., (1997), and Zollo and Winter (1999) asserted that DCs are complicated routines that emerge from path dependent processes “...in pursuit of improved effectiveness” (Zollo and Winter, 2002, p. 340).
### Table 13: Characteristics of Dynamic Capabilities. Source: Author

<table>
<thead>
<tr>
<th>Authors</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collis (1994)</td>
<td>Govern the rate of change of ordinary capabilities</td>
</tr>
<tr>
<td>Teece <em>et al.</em>, (1997)</td>
<td>Tangible/intangible - Unique asset</td>
</tr>
<tr>
<td>(Teece <em>et al.</em>, 1997)</td>
<td>Unique and idiosyncratic processes that emerge from path-dependent histories of individual firms</td>
</tr>
</tbody>
</table>
| Eisenhardt and Martin, (2000)                     | “Best practice” (2000, p. 1106) - Functions of DCs can be duplicated across firm, their value for competitive advantage lies in resource configuration that they create, not in capabilities themselves. Enhance resource reconfiguration Specific and identifiable processes - product development, strategic decision-making, and alliances Operational and strategic routines | Eisenhardt and Martin, (2000) |}

### Dynamic Capabilities: Teece (2014, p. 332)

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Achieving congruence with technological and business opportunities and customer needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tripartite schema</td>
<td>Sensing, Seizing, and Transforming</td>
</tr>
<tr>
<td>Capability –level goal</td>
<td>Signature processes</td>
</tr>
<tr>
<td>Priority</td>
<td>Doing the right things</td>
</tr>
<tr>
<td>Imitability</td>
<td>Inimitable</td>
</tr>
<tr>
<td>Mechanisms of attainability</td>
<td>Innovative and build</td>
</tr>
<tr>
<td>Results</td>
<td>Evolutionary fitness</td>
</tr>
</tbody>
</table>
On the other hand, Teece et al., (1997) describes DCs as high order capabilities, tangible/intangible assets - unique and idiosyncratic processes that emerge from path-dependent histories of individual firms. Zollo and Winter (2002, p.111) similar to early study by Teece et al., (1997) asserted that DCs have to be developed in-house through a ‘set of activities’ and ‘cognitive processes’ from focusing on the organisation’s own routines. However, Cepeda and Vera (2007, p. 426) contributed to the clarification of the links between OCs ‘how you earn your living’ and DCs ‘how you change your operational routines’. They build up on the knowledge management (KM) perspective to capture processes behind the development and utilization of DCs and examine their impact on operational capabilities.

The empirical evidence is provided by performing survey research with a sample of 107 firms in information technology in Spain. The KM processes behind DCs are broken up between the interplay between the firms’ strategic context (its mission and value proposition), the articulation and codification of desired knowledge configuration, the use of a KM infrastructure to replicate and retain new knowledge, and the articulation and codification of actual knowledge configuration available in the firm supporting the disaggregation of the KM processes. Firms in their sample build primarily on six available knowledge areas (1) legal knowledge, (2) knowledge about competition, (3) internal policies, (4) the public sector, (5) management style, and (6) market segmentation. Knowledge is seen as a strategic conversion processes that enables the firm to develop and improve functions and knowledge - based value – creation capabilities to a greater degree, and regulatory and culture capabilities to a lesser degree.

Pavlou and El Sawy, (2011) claim that DCs permit firms to create new combinations of their ordinary capabilities e.g. new product development processes or routines are higher-order DCs that are employed to reconfigure the types of products a firm manufactures or the services the firm offers (Danneels, 2008). This reconfiguration involves creating, modifying, repurposing, and releasing a firm’s internal (Eisenhardt and Martin, 2000; Danneels, 2010; Danneels, 2008) and external resources (Capron and Mitchell, 2009; Lichtenthaler et al., 2010). DCs are collective entities, which drive organisational heterogeneity and performance over time (Felin and Foss, 2005; Salvato and Rerup, 2011). They rely on managerial and organisational processes (Teece and Pisano, 1994; Teece et al., 1997; Teece, 2007; Eisenhardt and Martin, 2000; Helfat et al., 2007). They rest in firms’ processes that can alter the current position,
leading to an effect on a firm’s performance and competitive advantage, as well as to new positions and paths (Teece et al., 1997).

A study by Shuen et al., (2014) asserts that in the earlier versions of DCs (Teece et al., 1997) three processes are recognised as core to dynamic capabilities: (1) coordinating/integrating, (2) learning, and (3) reconfiguration. Integration and coordination routines involve combining resources, such as with the new product development processes. Learning is an outcome of practice and experimentation and allows tasks to be performed effectively. Reconfiguration refers to transformation, which in turn requires a recombination of existing resources. In Teece (2007), “asset orchestration” is identified as a meta-process that envelops and engages all three processes. Only business processes and business models however that yield value-enhancing differentiation are seen as constituting genuine DCs. Such processes are usually quite unique and firm specific and may be thought of as “signature processes” or “signature business models.” These arise from the firm’s organisational heritage and so are difficult for competitors to imitate. In order to make dynamic capabilities more operational, Teece (2007) identifies three types of “orchestration” of processes/activities: sensing, seizing and transforming focusing on particular types of DCs using a chain of logic that expand upon earlier work by him and his colleagues (Teece et al., 1997).

Eisenhardt and Martin (2000) belong to another influential school of thought that discussed the characteristics of DCs, claiming that DCs are processes that a firm can use to obtain, integrate, and reconfigure its own resource base. i.e. They identified three specific strategic and organisational processes like ‘product development’, ‘alliancing’ and ‘strategic decisional making’ that creates value for the organisation within dynamic markets by manipulating resources into new value creation strategies (2000, p. 1106). Although, their view differs from Teece et al., (1997) since they associate DCs with best practice that exhibit equifinality. As such they argue that DCs cannot be a source of CA or superior performance. Alternatively, Zollo and Winter (2002, p. 340) explained that DCs are “...in pursuit of improve effectiveness”. However, Helfat et al., (2007) and Arend and Bromiley (2011) questioned the extent to which DCs necessarily confer CA. They also claimed that researchers should not define DCs from their outcome. However, Bowman and Ambrosini (2003), Zott (2003), Ambrosini and Bowman (2009) found indirect links between DCs and value creation and competitive advantage. Zott (2003) argues that DCs are indirectly linked with a firm’s performance, aiming
to change its bundle of resources, operational routines, and competencies to affect performance.

The literature indicates three main influential scholars in the field; (1) Teece, (2) Helfat et al., and (3) Eisenhardt and Martin. The variation between these scholars is shown in Table 14 and questions the relevance of the theoretical framework (Peteraf et al., 2013). Arend and Bromile (2009) and Peteraf et al., (2013) raising questions over the frameworks’ core, purpose and its scope due to the lack of guidance for conducting empirical research.

However, the alternation between the two main schools Teece et al., (1997) and Eisenhardt and Martin (2000) is on boundary conditions, sustainable CA and questions the relevance of the theoretical framework (Peteraf et al., 2013). Eisenhardt and Martin (2000) argue that long-term CA lies in resource configurations, not DCs. Contrarily, Teece’s views long-term CA as an attribute of DCs. Table 14 shows the dimensions of these schools indicating various views towards the concept, although, the value of the theoretical perspective has been questioned from time – to – time (Winter 2002; Arend and Bromile 2009). Different interpretations, and contradiction between scholars have hampered the enlargement of the literature (Ambrosini and Bowman 2009). Peteraf et al., (2013) critically evaluated Teece, Pisano, and Shuen (1997) and Eisenhardt and Martin (2000) as representatives of two mutually exclusive approaches for framing DCs, each with its own internally consistent logic. Their findings suggest that the field is being socially constructed on the basis of separate domain knowledge.

As indicated the literature observed the nature of DCs and their role and consequences in dynamic environment which remain the focus of an ongoing debate (Easterby-Smith et al., 2009, Peteraf et al., 2013). Previous work by Teece et al., (1997), Teece (2007), and Zahra et al., (2006) describes the nature of DC as ability/ capability. Alternatively, Wang and Ahmed (2007) described the nature of DCs as a firm’s behavioural orientation. A diversification of views surrounding DCs on clear and generally accepted definitions, nature and the basic chain of logic that consolidate the foundation of theoretical develop, limits opportunities toward positivism (Easterby-Smith et al., 2009).

Nonetheless, Arend and Bromiley (2009) summarized the major problems that limit the potential of such conceptualisation; 1) unclear value added to existing concepts; 2) lack of
coherent theoretical foundation; 3) weak empirical support; and 4) unclear practical implication.

**Table 14: Three Influential Schools. Source: Author**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disciplinary orientation</strong></td>
<td>Economics, Strategy, and Technology</td>
<td>Organisational theories, science, behaviour: information system</td>
<td>Economics (Barney 1991 and Peteraf, 1993), strategy processes, Evolutionary economics, and organisational sociology</td>
</tr>
<tr>
<td><strong>DC Purpose</strong></td>
<td>Achieving congruence with customer needs and with technological and business opportunities</td>
<td>Technical efficiency in business function</td>
<td>DCs are related to change. Function: (1) To identify the need or opportunity, (2) respond to that need or opportunity, and 3 (taking action. Organisational and managerial processes are essential to change and to accomplish these changes.</td>
</tr>
<tr>
<td><strong>Conditions</strong></td>
<td>Complex and rapid changing environment</td>
<td>Moderately dynamic environment</td>
<td>Fail to explain the dynamic environment -which distinguishes DCs from other types of organisational capabilities.</td>
</tr>
<tr>
<td><strong>Attainability</strong></td>
<td>Build</td>
<td>Buy/build</td>
<td>Buy/Build</td>
</tr>
<tr>
<td><strong>Strategic processes</strong></td>
<td>Sensing: identification, development and assessment of technological opportunities in relation to customer needs Seizing: mobilization of resources to address needs and opportunities, and to capture value. Transforming: continued renewal High level activities</td>
<td>Specific strategic and organisational processes: product development, Alliancing, and strategic decision making</td>
<td>Administration, Operational, and governance (Technical) necessary to accomplish the task</td>
</tr>
<tr>
<td><strong>Routines</strong></td>
<td>Unique signature processes</td>
<td>Best practice</td>
<td>More than ‘best practice’</td>
</tr>
<tr>
<td><strong>Competitive advantage (CA)</strong></td>
<td>VRIN (source of sustainable competitive advantage) Sustainable CA.</td>
<td>Inimitable by rivals - are not necessary conditions for sustainable CA.</td>
<td>Not necessary lead to competitive advantage – direct association between DCs and CA is tautological in the same way as it is for the RBV. Conditions must be met before the DCs can be considered as source of value creation.</td>
</tr>
<tr>
<td><strong>Key priority</strong></td>
<td>Doing the right thing (effectiveness)</td>
<td>Doing things right (efficiency)</td>
<td>Search, select, and deploy</td>
</tr>
<tr>
<td><strong>Dependent path of the outcome</strong></td>
<td>Depending on market dynamism (unpredictable)</td>
<td>Predictable or unpredictable - depending on market dynamism.</td>
<td>Yardsticks, technical fitness, and evolutionary fitness -measure the performance of DCs</td>
</tr>
</tbody>
</table>
Whereas, Helfat and Peteraf (2003; 2009) argued that DCs are not required for capability building and strategic change. There are many other mechanisms that firms can use to address drive strategic change, including simple ad hoc problem solving (Winter 2003a). However, Easterby-Smith et al., (2009) questioned whether the effects of DCs are associated with a different understanding of what DCs are and how they have been used in the strategic conversion. The literature generally indicates that DCs are building rather than bought (Makadok, 2001; Teece, 2009) which makes accessibility and availability problematic, they are path dependent (Eisenhardt and Martin 2000; Zollo and Winter, 2002).

2.2.7 The Nature and Microfoundations (Teece 2007)

An early study by Teece et al., (1997) sketched the outline for a DCs approach asserting that DCs are an essential and sufficient condition for competitive advantage in an increasingly demanding environment. This was based on three main conditions; 1) distinctive processes (such as coordinating and combining), shaped by the firm specific, 2) asset positions (such as a firm’s portfolio of difficult–to-trade knowledge assets and complementary assets), and 3) the evolutionary path it has adapted or inherited. In light of this the competitive advantage of a firm lies with its managerial and organisational processes, shaped by its asset position, and the path available to its assets. In regard to the managerial and organisational processes, they refer to routines and patterns in the firm’s current practice. These processes have three roles “…coordination /integration (static concept); learning (dynamic concept); and reconfiguration (transformational concept)” (Teece et al.,1997, p. 518).

The framework suggests that options of strategic development are essential for enhancing clarity on organisational vision, mission and goals. They further state that the strategic alternatives available to the firm, and opportunities to increase returns are path dependent. For instance, Table 15 indicates the interrelation of DCs with the strategy indicating that sensing, seizing, and transforming require the combination of various aspect of management orchestration such as entrepreneurship, administrative competence/systems and leadership.

Teece (2014) stated that the foundation of DCs lies within sensing, seizing and managing threats/transformation referring the framework that he developed in 2007 (Figure 7) offering a
focal contribution with regards to the antecedent of DCs in writing about microfoundations for each of these three dimensions (Eriksson, 2013).

<table>
<thead>
<tr>
<th>Strategy kernel</th>
<th>Diagnosis</th>
<th>Guiding policy</th>
<th>Coherent Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related dynamic capabilities schema</td>
<td>Sensing</td>
<td>Seizing/transforming</td>
<td>Seizing/transforming</td>
</tr>
<tr>
<td>Nature of managerial orchestration</td>
<td>Entrepreneurial</td>
<td>Administrative</td>
<td>Leadership</td>
</tr>
</tbody>
</table>

Sensing opportunity is an organisational process, which depends on the processing of information with specific knowledge and practical wisdom. Identifying trajectories, capturing user’s needs and monitoring external development are examples. Seizing opportunity is related to the unbiased decision making of leaders deciding when, where and how much to invest. Selecting and creating a business model for strategy in the context of organisational innovation also needs to be taken into consideration. Routine and standard procedures built upon the previous success of the firm prevent decision making for radical innovation. The microfoundation of seizing opportunity is further specified into selecting the business model, enterprise boundaries, managing complements and platforms, and avoiding bias. Lastly, managing threats and reconfiguration brings attention to decentralisation, cospecialisation and knowledge management. Decentralisation of an organisation offers responsibility and flexibility to managers by giving them control of the decision-making process followed by higher performance. Cospecialisation is a process of enhancement of value by collaboration. It is especially signified in the industries where innovation is cumulative and requires a platform.

Teece's concept of DCs is a theory about the source of corporate agility: "...the capacity (1) to sense and shape opportunities and threats, (2) to seize opportunities, and (3) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the business enterprise's intangible and tangible assets." Teece (2007, p. 1319) asserted “The framework advanced can help scholars to understand the foundations of long-run enterprise success” while helping managers delineate relevant strategic considerations and the priorities they must adopt to enhance enterprise performance and escape the zero-profit tendency associated with operating in markets open to global competition. The framework
integrates the ‘strategy and innovation literature’ and highlights ‘the most important capabilities’ that the management needs in order ‘to sustain superior long run business performance’ (Teece, 2007, p. 1322).

In summary, Figure 7 aligns sensing, seizing, and transforming processes creating the general foundations of DCs and business performance. This is a central focus of the thesis that for analytical purpose will disaggregate three core processes of DCs in public procurement; sensing, seizing and transforming creating a robust procurement ecosystem aligning the typology of DCs in public procurement.
Figure 7: The Foundation of Dynamic Capabilities and Business Performance. Source: Teece (2007, p. 1342)
2.2.7.1 Sensing

Sensing represents the first recognised fundamental class of the strategic activities involving identification, development, co-development, and assessment of opportunities in relation to customers’ needs (Teece, 2007; Barreto, 2010) creating the ‘business ecosystem’ (Teece, 2007, p. 1320). As Denrell et al., (2003) observe, sensing valuable opportunities is indeed often a matter of ‘serendipity’ (2003, p. 978), a combination of prior knowledge, purposeful search and contingencies (Dew et al., 2009; Pandza and Thorpe, 2009). Entrepreneurial firms need to be creative (Schumpeter, 1934) and always alert (Kirzner, 1973; 2009). Creative search is “an enterprising decision that requires intuition and imagination and must precede any decision to go ahead with the exploration of an opportunity” (Pandza and Thorpe, 2009, p. 122; Penrose, 1959). Alertness ‘refers to a sense of what might be ‘around the corner’, i.e., the sense to notice that which has hitherto not been suspected of existing at all (Kirzner, 2009, p. 151).

However, Teece (2007) argues that the ability to recognise opportunities depends in part on an individual’s capabilities and extant knowledge, particularly about user’s needs in relationship to existing as well as novel solutions. He also states that if the supplier of a service/product fails to understand the customer’s needs, it is unlikely that the firm will be successful. In order to succeed with this activity, the individual must understand the information that is available. Teece (2007, p. 1323) also states: “...because of uncertainty the entrepreneur/manager must make informed conjectures about the path ahead”, this indicates that once a new evolutionary path become apparent, quick action is needed. Furthermore, he highlights the connection of ownership of the difficult-to-imitate assets with sustainable competitive advantage. In the dynamic capabilities tradition, the essence of strategy involves selecting and developing technologies and business models that build competitive advantage through “...assembling and orchestrating difficult-to-replicate assets, thereby shaping competition itself” (Teece, 2007, p. 1325). Figure 8 summarizes analytical systems and managerial capacities to learn, sense, filter, shape and calibrate opportunities.

Alternatively, Pablou and El Sawy (2011) identified three basic routines in the sensing capability; (1) Generating market intelligence (Galunic and Rodan, 1998), (2) Disseminating market intelligence (Kogut and Zander, 1996), and (3) Responding to market intelligence (Teece, 2007). They argued that these routines are related to kindred routines in the DCs
literature. Generating market intelligence relates to identifying customer needs (Teece, 2007), being responsive to market trends (Amit and Schoemaker, 1993), identifying market opportunities (Day, 1994), recognising rigidities (Sinkula 1994), and detecting resource combinations (Galunic and Rodan, 1998).

Figure 8: Elements of Ecosystem Framework for ‘Sensing’ Market and Technology Opportunities. Source: Teece (2007, p. 1326)

An early study by D’Aveni (1994) argued that responding to market intelligence relates to the initiating plan to capitalize in the market intelligence and pursuing specific market segmentation with the aim to seize new market opportunities (Teece, 2007). Whereas, Kogut and Zander (1996) asserted disseminating market intelligence to interpreting market intelligence is a critical activity making sense of events and developments, and exploring new opportunities (Teece, 2007).

However, in a strategic procurement context the development of a robust procurement strategy requires on understanding of the supply chain and the use of a comprehensive balanced scorecard as a performance indicator to allow an organisation to evaluate and track changes in performance (Mena et al., 2014). This requires extensive research to identify the organisation’s competitive position, its strengths and weakness and its relationship with the supply chain engaging with current and potential suppliers, and with other stakeholders i.e. supplier relationships. In integration sensing capability results from information sharing practices that inform partners about current and future physical flows (Barratt and Oke, 2007; Kulp et al., 2004; Müller and Gaudig, 2011). Zhou and Benton (2007) assert that the engagement with the sensing processes significantly enhances supply chain practices.
2.2.7.2 Seizing

Teece (2018) claim seizing capabilities determine how quickly the system can respond to opportunities and threats once they have been identified and deemed important. This pertains to the creation of a new product or services – as well as new business models –, which can transform recognised opportunities into valuable outcomes (Harreld et al., 2007; Teece, 2007). If sensing capabilities can provide access to external knowledge and “strategic flexibility to change and reconfigure firm operations” (Zahra and George, 2002, p. 198), seizing capabilities focuses on the realisation and exploitation of this knowledge. Teece (2007) clarifies elements involved in this process stating that maintaining and improving technological competences and complementary assets and investing heavily in technologies will be most likely to achieve marketplace acceptance. As a result, in order to achieve superior firm performance, the firm needs to strategize around investment decisions and get the timing right. However, the issues that the enterprise faces are not just when, where and how much to invest. The enterprise must also select or create a particular business model that defines its commercialization strategy and investment priorities (Teece, 2007). This often entails forging new relations with customers, competition, suppliers and distributors because companies that successfully build and orchestrate assets within the ecosystem stand to profit handsomely (Teece, 2011). Seven years later Teece (2018) has discovered that an investment in the commercialisation of new technology and the design and implementation of new business models and strategic approaches are key activities involved. In addition, Zahra and George (2002) claim that in networked environments, in fact, seizing DCs allow firms to absorb knowledge from external parties and transform it via valuable innovations.

However, Teece (2007) highlights the importance of value creation. He argues that choices of how to capture value help to determine the architecture and design of a business model. Furthermore, Teece states that the process of designing a business model is complicated - selecting, adjusting and/or improving the business model is a complex art. Nevertheless, the importance of the business model has been given short shrift in the academic literature, at least until quite recently. Important choices include technological choices, market segments to be targeted, financial terms (i.e. sales vs. leasing), and choices with respect to bundled vs. unbundled sales strategies, joint venture vs. leasing vs. go-it-alone approaches, etc. In addition, Teece (2007) further explains that designing a new business model requires creativity, insight and a good deal of customer-competitor and supplier information and intelligence. On the
procedure of developing a business model, Teece also highlights the significance of integrating know-how from the outside – from other organisations – and from inside the enterprise. Collaborating with others outside the business can help the company to shape new opportunities and to reconfigure these in new ways, to create competitive advantage. Although, Teece also points out the risk of sticking to the same processes and procedures and formulates that “the existences of layer upon layer of standard procedures; established capabilities, complementary assets, and/or administrative routines can exacerbate decision-making biases against innovation” (Teece, 2007, p. 1327). To reduce the risk of this occurring, Teece (2007) states that the more decentralized organisations with greater local autonomy are less likely to be blindsided by market and technological developments. Moreover, he notes that decision-making is likely to have a committee structure, with the top management requiring reports and written judgment for significant decisions. This tends to slow down decision-making and tends to reinforce the status quo. “One should not be surprised, therefore, if an enterprise senses a business opportunity but fails to invest” (Teece, 2007, p. 1327). Figure 9 summaries elements of this dilemma particularly around strategic decision making, skills required and execution.

![Figure 9: Strategic Decision Skills/Execution. Source: Teece (2007, p. 1334)](image)

However, Mena et al., (2014) suggest that in the procurement context the formulation and implementation of a procurement strategy follows up the analytical process of environment, supply chain and processes. They refer to the strategic map concept initiated by Kaplan and Norton (1996; 2004) that incorporates four perspectives in the balance scorecard: (1) financial,
(2) customer/stakeholders, (3) internal business processes, and (4) learning and growth. The first perspective involves cost reduction and expanding revenue coming opportunities. The second entails strategies that enable organisations to avoid inefficiency and errors, customer satisfaction, delivery improvement, and innovative solutions. The third perspective involves automating routine activities, internal customer engagement, internal and external collaboration, and supply innovation. The fourth perspective involves employee certification, skills improvement, job rotation and teamwork improvement.

In a buyer–supplier context, collaborative planning helps buyers seize advantage in the supply chain through collaborations among partners to develop and execute inventory and replenishment plans, as exemplified by vendor-managed inventory (VMI) (Govindan et al., 2013) and just-in-time replenishment systems (Lage and Filho, 2010). These systems reveal future contingencies and the resulting relationship duties and responsibilities (Claro et al., 2003). Such collaborative planning can complement integration-sensing activities (Foerstl et al., 2013); it also offers a more comprehensive picture for managing the supply chain.

Integration seizing advantage practices also might attempt to streamline supply chain activities, such as when a supplier customizes its production and transportation systems by synchronising these processes with those of its buyer. Such collaborative procedures and actions relate positively to supply outcomes (Flynn et al., 2010; Kulp et al., 2004; Monczka et al., 1998).

2.2.7.3 Transforming

Once opportunities are recognised and have been seized, transforming capabilities are needed to achieve “semi-continuous asset orchestrations and corporate renewal” (Teece, 2007, p. 1335). Transforming capabilities are responsible for retaining the elements of organisational systems aligned both with each other and with the strategy (Teece 2018). These capabilities are critical where a new business model involves a significant change in the organisation (ibid). Strategic renewal includes “the process, content, and outcome of refreshment or replacement of attributes of an organisation that have the potential to substantially affect its long-term prospects” (Agarwal and Helfat, 2009, p. 282). Semi-continuous asset orchestration includes processes such as coordination/integrating, learning and reconfiguring which are core elements of dynamic capabilities (Teece et al., 1997; Teece, 2007) and are fundamental to achieving evolutionary fitness (Helfat et al. 2007; Teece, 2011). In networked environments, integrating and recombining knowledge assets is essential, and learning must be promoted both within the
firm and via linkages with other organisations and supporting institutions (Teece, 2007). Learning processes, in particular, build closely on knowledge absorbed from external parties by a firm’s sensing and seizing activities, which may contribute substantially to its performance (Lavie, 2006a; b). Evolutionary fitness, in fact, often depends on value-enhancing opportunities based on network co-specialized assets (Gimeno, 2004), i.e., a particular class of complementary network assets “where the value of an asset is a function of its use in conjunction with other particular assets” (Teece, 2007, p. 1338).

Teece (2007) has also highlighted the significance of the talent to recombine and to reconfigure assets and organisational structures along with the change in markets and technologies that enhance organisational performance. In other words, some level of experience is needed to gain success and efficiency. According to Teece (2007, p. 1335) success will cause the entrepreneur to evolve in a path-dependent way and “a key to sustain profitable growth is the ability to recombine and to reconfigure assets and organizational structures as the enterprise grows, and as markets and technologies change, as they surely will”. Teece (2007) explains that individuals create opportunities and that this process requires knowledge, creative activity and the ability to understand customer needs. Furthermore, to sustain superior firm performance the enterprise has to develop corporate culture, design reward systems and retain committed talent (Teece, 2007). He further stressed the importance of taking influences from the external business environment into account, “integrating know-how” from the outside as well as within the enterprise is especially important to success when “systems” and “networks” are present” (Teece, 2007, p. 1339).

Teece’s (2007) further claims to sustain DCs decentralisation is required because it brings top management closer to new technologies as well as the customer and the market. Teece (2007, p. 1323) states that “because of the problem of information decays as information moves up (and down) a hierarchy, business must devise mechanisms and procedures to keep management informed.” According to Teece (2007, p. 1339) innovative businesses with limited experience have been known to fail when proactively monitoring and protecting know-how and intellectual property. Inside the enterprise, the old and the new must also be complementary. If they are not, business units must be disposed of or placed in some type of separate structure. Otherwise, work will not proceed efficiently, and conflicts of one kind or another will arise. Figure 10 summaries elements of a transformational cluster that also is a focus of this thesis.
In strategic procurement transforming capabilities change current processes in a dynamic environment. In strategic procurement, transformation capabilities should be embedded in processes that connect and align procurement strategy with the overall organisational strategy and different business units (Mena et al., 2014). Studies by Krause et al. (2007) and Wagner and Krause (2009) suggest several processes that if continually used could improve the supply chain i.e. supplier development or additional investments in coordination systems, which enable firms to learn from one another, co-specialise, making changes to their own internal processes when needed and continuously improvement. Such transformation processes are in line with Swink et al. (2007) concept of strategic integration, entailing activities that acquire, share and consolidate strategic knowledge with partners outside the organisation to align and fit with business processes. These activities are especially important in a moderately dynamic environment (Eisenhardt and Martin, 2000) and highly (Teece et al., 1997; Teece, 2007) dynamic environments.

2.2.8 Empirical Evidence

2.2.8.1 Dynamic Capabilities in a Private Sector Context

There is ongoing debate regarding the level of empirical studies in the field of DCs. Zahra et al., (2006) express concerns regarding its slow theoretical development as a result of lack of
generally accepted framework in academia and inconsistency of application. Arend and Bromiley (2009, p. 76) also state that:

“…scholars have portrayed dynamic capabilities as direct drivers of competitive advantage as preconditions, moderators and mediated or moderated drivers of firm performance or firm change, as combinations thereof.”

Arend and Bromiley criticised the theoretical development of DCs for its lack of clarity, oversimplified dynamics, unresolved measurement issues and weak empirical support. However, Helfat and Peteref (2009) addressed this by clarifying the DCs concept in relation to its development and the challenges faced. In light of the literature discussed and reviewed, the researcher argues that empirical work in the field of DCs has advanced, capturing broad topics such as technological innovation, mergers and acquisitions, strategic alliances, top managers’ decision-making, firms’ survival and growth (Helfat et al., 2007) in context variation. i.e. technology–based entrepreneurial firms (Galunic and Eisenhardt, 2001; Kor and Mahoney, 2005), pharmaceutical firms (Rothaemel and Hess, 2007), manufacturing industry (Menguc and Auh, 2006a; b), grocery chains (Marcus and Anderson, 2006) and the finance industry (Zuniga-Vicente and Vicente-Lorente, 2006). Another issue raised by various scholars in the field is the methodology employed in these studies. Ambrosini and Bowman (2009) claim that the field is dominated by qualitative methods. Whereas, Eriksson (2013) highlights the versatility of the theoretical bases behind the DC approach, referring to Wang and Ahmed (2007) and Di Stefano et al., (2010) a discussion that may complicate the selection of research methods. Paying attention to methodological issues is essential for the advancement of the field (Meglio and Risberg, 2010). The early study by Hitt et al., (1998) suggest that conceptual complexity calls for sophisticated methodologies.

Despite the ongoing criticism and scepticism, in light of the literature observed the researcher can argue that there is evidence of a large number of empirical studies focused on the characteristics of DCs (Helfat, 1997; Galunic and Eisenhardt, 2001; Ander and Helfat, 2003; Lampel and Shamsie, 2003). An early empirical study by Helfat (1997) and Adner and Helfat (2003) investigated the background of DCs focusing on 26 large USA energy firms employing archival methods. Their findings indicate that in response to fluctuations in the oil price, firms with large complementary physical assets and technological knowledge are likely to do better in a changing environment. However, their empirical work on DCs for analysing the oil
industry faced criticism by Arend and Bromiley (2009) since the industry at the time was considered to be stable. Galunic and Eisenhardt (2001) also empirically investigated characteristics of DCs in the private sector, focusing on a 100 high-technology companies. The multitude of business corporations that compete in the variety of technology-based industries such as computing, electronics and telecommunication engaging in frequent resources combinations among its division. Their findings suggest that envisaging corporate divisions as combinations of capabilities and product market areas of responsibility that may be recombined in various ways highlights the interplay of economic and social imperatives that motivates such recommendations. DCs consist of a few simple, often competing, rules and enable highly adaptive behaviour. Two years later another empirical study by Lampel and Shamsie (2003) explored characteristics of DCs focusing on 400 firms in the US motion picture industry (1941-1948) using the archive method employed by Helfat (1997). Their findings suggest two industry capabilities –mobilising and transforming capabilities play a crucial role in assembling resource bundles into feature films.

Alternatively, the study by Green et al., (2008) provided empirical insights into how contracting firms adapt to changing circumstances, explaining the extent to which the ‘contested’ concept of DCs could provide insights into the competitiveness of contracting firms. They used a case study of Southern Construction (England). The study demonstrated the empirical elusiveness of dynamic capabilities. Their findings suggest that dynamic capabilities are best conceived as something organisations do, rather than something that they have. Despite that, the study confirms the importance attached to path dependency (Teece et al., 1997).

Similarly, Judge et al., (2009) explored the nature of overall organisational capability and competitive advantage in a wide variety of industries and regions within Russia, a complex and rapidly changing transition economy, giving particular attention to dynamic capabilities known as organisational capacity for change and environmental factors. They used a survey as the data collection technique, implementing mixed methods. Their findings suggest that dynamic capabilities and organisational change literature, known as ‘organisational capacity for change,’ is positively associated with firm performance within a wide variety of Russian firms. The relationship between organisational capacity for change and firm performance is stronger when there are relatively high levels of uncertainty within the task environment. Finally, they found that organisational capacity for change is an important attribute in all sizes of
organisations, not just for large organisations as hypothesised. Whereas, Kindstrom et al., (2011) focused on eight qualitative case studies representing three distinct organisational groups: general business managers, service managers, and service engineers in product–centred firms to empirically examine DCs microfoundation related to service innovation.

**Table 16: Microfoundations of Service Innovation. Source: Adapted from Kindstrom et al., (2011)**

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<td><strong>- Customer-linked service sensing:</strong> Building up deep customer knowledge, including institutionalizing feedback loops and creating organisational roles, systems, and processes that continuously capture and relay customer demands.</td>
<td><strong>- Service interactions:</strong> Interacting and co-developing with customers and partners to understand, visualise, and deliver value propositions. Involves processes, roles, and skills to interact and change together with customers.</td>
<td><strong>- Orchestrating the service system:</strong> Managing and transforming the service system, especially managing external actors’ central to performance of the service. An ability to extend the resource base into new markets and services, and to incorporate complementary resources and co-specialisation.</td>
</tr>
<tr>
<td><strong>- Service system sensing:</strong> Building up an understanding of the entire service system, including links to partners and suppliers, and creating network skills. Internal service sensing: i.e. Opportunities related to the integration of products and services and the detection of decentralized initiatives.</td>
<td><strong>- Managing the service delivery process:</strong> Ability to restructure internal and external resources swiftly, for the delivery of new or improved services - at both operational and strategic levels. Structuring the service development process and being flexible as the process develops.</td>
<td><strong>- Balancing product and service-innovation related assets:</strong> Maintaining a balanced relationship between the service organisation and the product organisation, necessitating the creation of roles designed for service at all levels of the organisational structure.</td>
</tr>
<tr>
<td><strong>- Technology exploration:</strong> Scanning and exploring sources outside the service system, primarily related to more radical technological changes.</td>
<td><strong>- Adopting new revenue mechanisms:</strong> Rolling out new revenue mechanisms based on service value, such as availability and customer productivity. The ability to visualise the value of new, often intangible services and solutions for a wide array of actors in the service-delivery system.</td>
<td><strong>- Creating service-oriented mental model:</strong> Often referred to as a service logic; implies a learning dimension.</td>
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Their findings demonstrate the need for an extended, sometimes completely new, underlying processes if a firm’s offering of customer product–service solutions is to remain competitive. This goes beyond the traditional microfoundations that has previously underpinned firms’ traditional operation approach, to the innovative behaviour that is necessary for development of those DCs that support innovation *(ibid)*. This study also demonstrates challenges that firms are currently facing in terms of remaining competitive if firms’ DCs rest solely on a product–
based microfoundations. They suggest that strategies seeking to identify and exploit the benefits to be derived from service innovation cannot rely only on capabilities geared to product-driven and manufacturing-driven innovation. They identified the microfoundations of service innovation summarised in Table 16 disaggregating DCs into three groups: sensing, seizing, and reconfiguring, drawing upon Teece’s (2007) approach. Controversially they claimed that the list of microfoundations identified in service innovation is consistent with the work of Eisenhardt and Martin (2000) in laying no claims to being either a comprehensive or exhaustive inventory of all possibilities. This indicates that a new microfoundations could be developed relevant to a specific sector or organisation.

A study by Feiler and Teece (2014) empirically explored DCs to understand how a global exploration division of a major IOC, Supermajor EXP - oil and gas sector develop DCs using the framework as an analytical tool to be organise strategic oversight around three clusters of activity; sensing, seizing and transforming. Their study highlighted three DCs that EXP develops and priorities: (1) accuracy in volume and risk predictions in investment proposals - the degree to which the subsurface reality is exposed when the well is drilled, (2) strategic deployment of talent into the ventures and projects with the highest economic value - right people, in the right seats, doing the right thing, with other right people, at the right time, and (3) effective management of the centralised – decentralised polarity. The company created strategic agility by managing 10 important DCs summarised in Table 16. This case study provides insights into how DCs enhance overall organisational effectiveness. Their study suggest that strategic allocation of the technically competent people combined by an effective organisational structure lead to sustainable performance improvement in complex environment.

In summary, Table 17 provides an overview of examples of DCs in the private sector. The literature indicates that DCs have been studied mainly in a private sector context such as large international companies operating in the Oil and Gas industry (Helfat 1997; Adner and Helfat, 2003; Feiler and Teece, 2014; Shuen et al., 2014), technology firms (Galunic and Eisenhardt, 2001; Kor and Mahoney, 2005), pharmaceutical firms (Rothaemel and Hess, 2007), manufacturing industry (Menguc and Auh, 2006), grocery chains (Marcus and Anderson, 2006) and the finance industry (Zuniga-Vicente and Vicente-Lorente, 2006). The methodologies used varies considerably – ranging from in-depth case studies to large scale of cross – sectional studies (using survey or secondary data), while a few mix-method studies
### Table 17: Examples of Dynamic Capabilities in the Private Sector. Source: Author

<table>
<thead>
<tr>
<th>Authors</th>
<th>DCs in the Private Sector</th>
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<tbody>
<tr>
<td>Helfat (1997)</td>
<td>Research and development.</td>
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<tr>
<td>Teece <em>et al.</em>, (1997)</td>
<td>Routines for integrating, coordination, learning, and reconfiguration</td>
</tr>
<tr>
<td>Ambrosini and Bowman (2003)</td>
<td>Organisational and management processes. Reconfiguration – transformation and recombination of the assets Leveraging – replicating a process or the system that operates in one business unite to another, or extending the resource by deploying in into new domain (i.e. applying the existing brand to e new set of products). Learning – allows task to be performed more effectively and efficiently as a result of learning from the experience of the success or a failure. Creative integration- the ability of the firm to integrate its assets and resources, resulting on new resource configuration.</td>
</tr>
<tr>
<td>Ambrosini and Bowman (2009); Helfat <em>et al.</em>, (2007); Teece (2007)</td>
<td>Learning (R&amp;D activities), new product and process development, alliancing, strategic decision-making, resource allocation.</td>
</tr>
<tr>
<td>Kindstrom <em>et al.</em>, (2011, p. 1067 - 1068)</td>
<td>Sensing: Customer-linked service sensing, service system sensing, Internal service sensing, and technology exploration. Seizing: Service interactions, managing the service delivery process, structuring the service development process, and adopting new revenue mechanisms. Reconfiguring: Orchestrating the service system, balancing product and service-innovation related assets, and creating service-oriented mental model.</td>
</tr>
<tr>
<td>Feiler and Teece (2014, p. 16)</td>
<td>• Accurate volume and risk predictions in investment proposals (Priority). • Strategic orchestration of human resources: to recruit, train and develop talent in timely and effective manner (Priority). • Effective management of the centralised – decentralised polarity; to entrust managers in the ventures with managerial and operational decisions relate to the specification of the venture, while also protecting the need at the</td>
</tr>
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</table>
centre of the organisation for communication, cross-venture collaboration, quality, efficiency and effectiveness (Priority).

- Effective management with non-technical risks across the business ecosystem: including the safe deployment of resources into the area(s) that are politically unstable or environmentally fragile.
- Rapid deployment of technical and process innovations into venture with high economic value.
- Restructuring - including new leadership and management structures, with dedicated financial, human and technological resources and synergetic linkages
- Timely learning throughout the organisation - development of cross border, cross-organisational and cross-generational knowledge networks.
- The orchestration of external and internal partnerships required completing the work and creating value.
- The establishment of capability as a strategic and cultural imperative.

| Teece, Peteraf, and Leih (2016) | • Managerial competencies for reading the environment and developing business model
• Mobilisation of resources to address needs and opportunities and capture value |

combined qualitative and quantitative methods.

**2.2.8.2 Dynamic Capabilities in the Public Sector**

The literature observed so far indicates that DCs are embedded in a context and can only be studied as such (Helfat et al., 2007; Piening 2013). It also indicates that the DCs perspective has received relatively little attention in the public sector (Harvey et al., 2010; Klein et al., 2010; Oliver and Holzinger, 2008; and Pablo et al., 2007; Piening, 2013) despite the rapidly changing environment of the public sector and related implications (Winter, 2003; Ambrosini et al., 2009; Easterby-Smith et al., 2009; Killen and Hunt, 2010; Chien and Tsai, 2012). Two influential schools Helfat et al., (2007) and Teece (2007) claim that to survive and prosper under the pressures of an unpredictable economic environment organisations must develop DCs to create, extend and modify their own resource base. Several studies by Cepeda and Vera (2007), Griffith et al., (2006), Lee et al., (2002), Helfat et al., (2007) emphasised the strategic role of DCs making explicit and direct links between DCs and CA. This strategic role of DCs towards CA in such a dynamic environment has catapulted this issue to the forefront of the research agendas of many scholars, not only in the private sector (Daniel and Wilson, 2003; Lampel and Shamsie, 2003; Lenox and King, 2004; Salvato, 2003; Teece et al., 1997; Zott, 2003).

Recently research have started to apply DCs in public sector organisations (Daniel and Wilson, 2003; Carmeli and Tishler, 2004a, b; McNulty and Ferlie, 2004; Pablo et al., 2005; Jas and
Skelcher, 2005; Jones et al., 2005; Vera and Crossan, 2005; Ridder et al., 2007; Wilson and Daniel, 2007; Easterby-Smith et al., 2008; Harvey et al., 2010; Lee and Drake, 2010; Fernandez and Wise, 2010; Klein et al., 2010; Guimarães et al., 2011; Piening, 2011; Salge and Vera, 2011; Douglas et al., 2012; Piening, 2013) exploring the potential of the DC approach for the public sector looking at it from different angles. However, none of the studies investigated DCs in a procurement context, which is the main focus of the study suggesting a major opportunity to add to the theoretical development through this study.

Ridder et al., (2005) used a qualitative approach focusing on a multiple case study of six clinical departments of a public sector body in Germany. Their research focus was to examine the underlining dynamics that shape the implementation of accrual accounting and output-based budgets - microfoundation, antecedents and effects of DCs. Their findings suggest that the ability of clinical departments to develop new operational capabilities or reconfigure existing capabilities in order to deal with a reimbursement system depends on their evolutionary path and distinctive DCs i.e. learning and coordination processes.

Another study by Pablo et al., (2007) used the DCs perspective to understand how health authorities in Canada developed a new strategic approach based on a particular focus on learning through experience as an internal DC. Study by Harvey et al., (2010) was further focused on the performance of a public organisation reviewing the conceptual and methodological implications of adaptive capabilities, derived from the broad concept of DCs. Two years later Douglas et al., (2012) developed a model using the DCs perspective as a source of competitive advantage to understand management perception of what is consider high performance for LAs in England.

Controversially, other studies by Daniel and Wilson (2003), Carmeli and Tishler (2004), Jas and Skelcher (2005), Jones et al., (2005), Vera and Crossan (2005), Lee (2010), Guimarães et al., (2011) focused on the microfoundations and effects of DCs in the public sector by examining the relationship between variables. Their empirical research indicates the existence of DCs in PSO asserting that PSOs create, develop, and deploy DCs that enhance their ability to respond to a complex and volatile environment and perform better. In a similar vein Cepeda and Vera (2007, p. 427) assumed that “…if the firm has dynamic capabilities, it must perform well, and if the firm is performing well, it should have dynamic capabilities”. The studies found a correlation between DCs and managerial and organisational processes similar to the private
sector (Lee, 2001; Carmeli and Tishler, 2004; Jones et al., 2005; Easterby-Smith et al., 2008; Pablo et al., 2007; Piening, 2011). This indicates that these processes are mechanisms by which DCs are put into use and how they are developed and deployed.

More studies viewed DCs in a PSO context as a necessary mechanism to enable the organisation to address environmental complexity (Boyne and Meier, 2009; Piening, 2012). Similarly, they described the environmental turbulence in the public sector as a function of three elements: ‘munificence’ referring to availability of resources, ‘complexity’ referring to homogeneity or heterogeneity of external pressures that confront the public sector, and ‘unpredictability’ referring to the degree of turbulence. Other studies have recognised this but are not convinced (Osborne and Brown, 2005; Fernandez and Rainey, 2006; Rashman et al., 2009; Piening, 2013). They argue that creating mechanisms that address change are a challenging task, since public managers have to satisfy multiple, sometimes conflicting, goals imposed on them by numerous stakeholders.

PSOs often lack flexibility, which leads to an inability to respond quickly to changing conditions, as changes is initiated, such as the adaption of administrative and technological innovations, frequently losing steam in the implementation stage (Ridder et al., 2005; McNulty and Ferlie, 2003; and Borins, 2001). Under such conditions the ability to address strategic change and create value through the development of new capabilities is seen as a significant requirement (Zollo and Winter, 2003, Zahra et al., 2006).

As briefly mentioned above Pablo et al., (2007) considered ‘learning through experimenting’ as a route to continually improving an organisation’s ability to perform. This is in a similar vein to Eisenhardt and Martin (2000), which categories those internal processes that integrate and reconfigure resources. Their findings however, suggest that the process of developing and implementing dynamic capabilities occurs in three phases; (1) The identification of DCs - learning through experimenting, (2) Enabling the DCs, and managing the ongoing tension by a supportive leadership style to encourage personal initiative and trusting relationships, and (3) Managerial capacities and commitment are vital in identifying, enabling and managing the use of dynamic capabilities. Furthermore, their study suggests that further research on DCs in PSOs could contribute to the ongoing debate in strategic management research regarding the nature, functioning, and exploratory value of DCs. Hence; while DCs have been studied in highly dynamic industries such as semiconductors and biotechnology. Easterby-Smith et al., (2009)
and Barreto (2010) argue also that research is needed in other contexts most notably in PSO to provide a more comprehensive picture of those capabilities. Table 18 provides an overview of examples of DCs in PSO.

### Table 18: Examples of Dynamic Capabilities in the Public Sector. Source: Author

<table>
<thead>
<tr>
<th>Authors</th>
<th>DCs in the Public Sector</th>
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<tbody>
<tr>
<td>Lee (2001)</td>
<td>Knowledge sharing capabilities</td>
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<tr>
<td>Daniel and Wilson (2003)</td>
<td>Develop and deploy different capabilities – organisation is capability to build commitment to change both with the organisation and within external stakeholders or its ability to integrate business processes into existing activities Learning by doing is an essential mechanism through which an organisation builds dynamic and operational capabilities</td>
</tr>
<tr>
<td>Carmeli and Tishler (2004)</td>
<td>Managerial capabilities</td>
</tr>
<tr>
<td>Jas and Skelcher (2005)</td>
<td>Organisations experience success, incentives for continuous improvement, leadership capabilities, and appropriate action</td>
</tr>
<tr>
<td>Ridder et al., (2005)</td>
<td>Resource availability, training and capabilities to transfer new rules and procedures into day-to-day routines - Learning and coordination processes.</td>
</tr>
<tr>
<td>Pablo et al., 2007</td>
<td>Learning through experimenting</td>
</tr>
<tr>
<td>Pavlou and El Savvy (2009)</td>
<td>Ability to sense the environment, to learn, to coordinate and to integrate - reconfigures exiting operational capabilities into new one that betters match the environment.</td>
</tr>
<tr>
<td>Watson et al., (2010)</td>
<td>Organisation intervention in the form of empowerment – enhancing strategy, learning, and good management – employee’s relationship – associated with higher order capabilities. Low structural complexity and consistency in staffing are key attributes - associated with higher order capabilities</td>
</tr>
<tr>
<td>Andres, Beynon, McDermott (2015)</td>
<td></td>
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#### 2.2.8.3 Knowledge Gap

The literature review observed indicates the versatility of the DCs approach since its origins lie in strategic management, but it has been applied in areas as diverse as marketing, entrepreneurship (Zahra, 2006; Barreto, 2010; Arend, 2014; Teece, 2016), service innovation (Kindstrom, 2013; Janssen, 2014; 2016) and risk management (Arena, 2013; Nair, 2014; Teece, 2016). Various scholars (Schreyogg and Kliesch-Eberl, 2007; Arend and Bromiley, 2009) call for more a rigorous and explicit approach. However, the unified view upon the fundamental nature of DCs and its association with the public sector would represent a significant step towards consolidating the body of the theory. The theory must progress beyond the existing general agreement that DCs are associated with private sector organisations as a
source of competitive advantage in a dynamic environment (Teece et al., 1997; Teece, 2007; Helfat et al., 2007; Teece, 2013; 2014; 2016) and ‘one type of change, the intentional change of the resource base’ (Ambrosini and Bowman, 2009, p.33). Researchers currently differ as to what extent DCs could be applied in public sector organisations and how the theory could be converted into strategic activities.

The literature review also indicates that the DCs approach has not yet become a prevalent theoretical framework that addresses changes in conditions or explains why many PSOs fail to do so (Pablo et al., 2007; Klarner et al., 2001; Osborn et al., 2008). In contrast, in the private sector it has become a prevalent strategic management tool that enhances organisational performance, competitive advantage, and addresses changes in a volatile environment (Teece et al., 1997; Eisenhardt and Martin 2000; Pierce et al., 2002; Teece, 2007).

In light of the public-sector literature observed DCs hold potential for public sector organisations (Lee, 2001; Carmeli and Trishle, 2004; Jones et al., 2005; Pablou et al., 2007). The empirical research shows that PSOs benefit from having DCs such as reshaping capabilities (Jones et al., 2005), knowledge sharing capabilities (Lee, 2001), or managerial capabilities (Carmeli and Tishler, 2004, Helfat et al., 2007). DCs in the public sector context have been studied in the UK, Germany, the USA, and Australia, with particular focus on the NHS and health care organisations (Pablo et al., 2007; McNutly and Ferlie, 2004; Ridder et al., 2007; Piening 2011; Salge, 2011), government departments and agencies (Daniel ad Wilson, 2003; Lee, 2001; Jones et al., 2005)), local authorities (Carmeli and Tishler, 2004; Jas and Skelcher 2005), municipality (Ridder et al., 2005; Vera and Crossan, 2005) and public schools (Fernandez and Wise, 2010; Piening, 2013). However, this literature review clearly indicates a gap in the literature since only two studies have been identified that looked at DCs in the procurement context, Li (2013) and Hartmann et al., (2014). Li (2013) discussed broadly the concept in the context of public procurement. Whereas, Roehrich et al., (2014) look at it in the context of private sector procurement, aiming to examine the change in the interactions between buyers and suppliers, the emergence of the value co-creation and capability development during the transition process.

This thesis draws on Teece’s, (2007) microfoundations and follows a similar research approach to Feiler and Teece (2014) using the DCs framework developed in 2007 to organise strategic oversight around three clusters of activities: sensing, seizing and transforming. Therefore, this
thesis will fill the gap in the literature by extending DC theory into public sector procurement with an intention to create the microfoundation of DCs in public procurement using Teece’s (2007) framework. In addition, this will contribute not only on the theoretical development of the subject area but also would be useful for practitioners since the procurement paradigm is shifting from the traditional administrative and transactional one to strategic engagement (Tassabehji and Moorhouse, 2008; Mena et al., 2014; Ndrecaj and Ringwald, 2015; White et al., 2016; Ndrecaj, 2016).

2.3 Public procurement strategic approach

As discussed in Chapter 1 procurement has been elevated from a traditional paradigm to one of greater strategic importance (Murray, 2009; Benito, 2010; Crandall et al., 2010; Prasad et al., 2012; Drake et al., 2012; Lysons and Farrington, 2012; Payne et al., 2012). Early studies by Farmer (1972); Porter (1985); Carr and Smeltzer (1999); Cousins (2005) highlighted the importance of strategic procurement and its strategic aliment with corporate strategy including the priorities of management and values of the authority (Llewellyn and Tappin, 2003). Another early research by Browning et al., (1983) suggested that the procurement function contributes in at least four distinct areas to an organisation’s strategic planning action through: monitoring the supply market trends; interpreting the meaning of these trends; identifying the materials and services needed and developing supply options. However, the use of strategies is not ‘rooted’ within public sector procurement and strategies have to be innovative and adapted to public procurement processes and procedures; within procurement the tender process could not be changed due to regulations but a strategy of what is to be procured could be utilised (Dereli, 2003). Nonetheless authorities have been cautious in thinking of new ways to reform their processes; this may be due to having to provide more services with smaller budget to do so and that managing strategies that consider political, economic and social aspects are hard to create but even harder to apply within the public sector (Llewellyn and Tappin, 2003).

2.3.1 Procurement strategic approach: Innovation

Literature has emerged in recent years analysing the influence of procurement on the stimulation of innovation and development of new technologies and advocating the active use of it as an innovation policy instrument (Uyarra, 2010). This strategic approach involves various procurement activities such as interaction and collaboration between stakeholders (Holbrook and Wolfe, 2002). Emphasising innovative collaboration, sharing best practice and
strategies could be a more favourable option for public sector procurement (Conteh, 2012). Many academics suggest that public sector procurement is about co-coordinating activities with other local authorities to optimise results (ibid). Murray and Rentell (2008) suggest that local authority best practice is that a strategy should align with socio-economic goals. However, with the on-going austerity environment for PSO there could be conflict between short and long-term strategic and operational priorities (Murray, 2009).

Pre-commercial Procurement (PCP) and Public Procurement of Innovation (PPI) were introduced by the EU to enable the Public Sector to become drivers of innovation in the procurement of goods and services. Lucas et al., (2012, p. 14) defined PCP as an

“...approach to procuring R&D service...triggered by procurers identifying the need to find a solution to a specification problem of the public interest for which they cannot yet find commercially ready or nearly ready solutions on the market and which required a significant amount of R&D investment...to get the solution developed.”

Innovation Partnerships (IP) was introduced in the Procurement Directive 2014/24. So, what are PCP, PPI and IP? Before looking at the “vehicles” of innovation, the definition of innovation in accordance with the EU directives. The Guidance for Public Authorities on Public Procurement of Innovation defined innovation as

“...the implementation of a new or significantly improved good, service or process, including but not limited to production, building or construction process, a new marketing method or a new organisational method in business practices, with the purpose of helping to solve societal challenges.”

So how can Pre-commercial Procurement (PCP) be applied to meet this definition? PCP is an approach for acquiring Research and Development services which enable public procurers to:

- Share the risks and benefits of designing, prototyping and testing new products and services with suppliers and other stakeholders such as the end-users.
• Create the optimum conditions for wide commercialisation and take-up of R&D results through standardisation and/or publication.
• Pool the efforts of several procurers. (What is PCP, 2016)

PCP only applies to R&D services it “...does not include the acquisition of larger volumes of resulting end-solutions on a commercial scale and must not constitute State aid” (Guidance for Public Authorities on Public Procurement of Innovation). Figure 11 provides a detailed overview of the PCP processes, where the main PCP phases are marked in green. Specific steps of activity are indicated for each phase, and throughout the entire pathway, evaluation and dissemination described are represented as constant activities essential to the process.

Figure 11: Phases of the Pre-Commercial Procurement within R&D Lifecycle. Source: Lucas et al., (2012, p. 25)

PCP is still governed by a tender process, which ensures that the award of the work is carried out in a fair, open, transparent and competitive way. Each stage of the PCP cycle should follow a tender process which ensures that the R&D services are procured at a market rate and opens up the market place enabling more than one operator to develop the end solution. The regulations stipulate that PCP contracts should be awarded to more than one operator for each phase. Each phase will be delivered in line with the original scope & proposal of that phase, payment made and a decision to proceed to the next phase agreed.
PCPs are not subject to the full tranche of public procurement regulations that ordinarily apply, for example, allowing bodies to go outside of existing frameworks. This helps encourage SMEs to participate since public procurement rules are often burdensome to comply with and serve as a barrier to SME participation in public projects. SMEs are often some of the most creative, innovative and flexible companies and so this model of procurement can help public bodies tap into the very best ideas. (LLP, 2016).

Hence, this leads to a better understanding of what PCP is, and now phase 4 or PPI can be explored. What does PPI enable public sector procurers to do? ” Public procurement of innovation (PPI) occurs when public authorities act as a launch customer for innovative goods or services. These are typically not yet available on a large-scale commercial basis and may include conformance testing.” (Innovation Procurement: About PPI, N.D)

PPI has been classified in the literature as a demand-side innovation policy comprising of “a set of public measures to increase the demand for innovations, to improve the conditions for the uptake of innovations or to improve the articulation of demand in order to spur innovations and the diffusion of innovations” (Edler and Georghiou, 2007, p. 952). Hence, for the definition of PPI in this research two main approaches of PPI need to be distinguished. First, PPI is often defined as a tool for stimulating the development of new products (goods, services, systems) and secondly, as an attempt to increase access to innovation (Uyarra and Flanagan, 2010; Rolfstam, 2012; Edler et al., 2011; Allman et al., 2011). Edquist and Zabala-Iturriagagoitia (2012a; b) categorised PPI into two types, Direct and Catalytic.

**Direct PPI** - is when the procuring organisation is also the end-user of the product resulting from the procurement. The buying agency simply uses its own demand or need to influence or induce innovation; this type of PPI includes the procurement undertaken to meet the (‘mission’) needs of the public agencies themselves. However, the resulting product is often also diffused to other users. Hence, innovations resulting from PPI can be useful for the performing agencies, as well as for society as a whole.

**Catalytic PPI**- is when the procuring agency serves as a catalyst, coordinator and technical resource for the benefit of end-users. The needs are located ‘outside’ the public agency acting as the ‘buyer’. Hence, the public agency aims to procure new products on behalf of other actors. It acts to catalyse the development of innovations for broader public use and not for directly supporting the mission of the Agency (ibid)
Piga and Tatrai (2015) describe Innovation Partnership (IP) as a process whereby the development and production are procured through one single tender. The innovator also obtains the contractual right to produce the innovation. The procedure allows contracting authorities to establish a long-term innovation partnership for the development and subsequent purchase of new innovative, products, works and services, provided they can be delivered at agreed performance levels and costs. The partnership is structured in successive stages following the sequence of steps in the research and innovation process, possibly up to the manufacturing of the supply or the provision of the services.

The EU Directive governs innovation partnership. The competitive procedure with negotiation was introduced in the 2014 Directive. This enables the contracting authority to specify the required characteristics of the goods or services in advance of the competition as opposed to the pre-existing route of competitive dialogue whereby the specific requirements cannot be clearly or adequately defined in advance. Competitive dialogue was updated in the 2014 Directive, which enables it to be used to procure design or innovative solutions.

There are online resources such as the Procurement of Innovation Platform, which is custom made and aims to support public authorities with policies, research, advice and examples of PPI across Europe. The guidance for public authorities on Public Procurement of Innovation further explains that the platform has been developed by ICLEI with support from the European Commission, and in partnership with PIANO - the Dutch Public Procurement Expertise Centre, REC - the Regional Environmental Centre for Central and Eastern Europe and IWT - the Flemish Agency for Innovation by Science and Technology

So where is the UK in relation to its European counter parts in embracing innovation? The UK is considered a ‘first mover’ (Edler, 2013; Uyarra, 2013; Uyarra et al., 2013) in the promotion of policies and initiatives seeking to stimulate innovation through public procurement, as well as addressing the modernisation of public procurement more generally (Uyarra et al., 2014). As an example, the UK Government has put aside £82 million for the development and purchase of innovative transport technology, part of the ‘Driving the Future Today’ the Government’s strategy for ultra-low emission vehicles in the UK published in September 2013 (Innovation Procurement: Facts and Figures, no date). The UK has also setup other departments such as the Department for Business Innovation and Skills, the Prime Minister’s Strategy Unit
and the National Endowment for Science, Technology and the Arts (NESTA). NESTA launched the Public Lab, which works to find innovative ways to source services at reduced cost. The Lab setup a project with a fund of £1m, which encouraged UK citizens to contribute ideas to support initiatives in relation to climate change. More than 350 groups came forward with a range of suggestions. 10 finalists were chosen to put forward their suggestions and compete for a share of the £1m (Lee et al., 2012).

The EU has put in place “vehicles” to support the process as well as provided funding to start the process, so what are the barriers to member states engaging in PCP, PPI, and IP? Uyarra et al., (2014) carried out a study to look at what barriers are preventing innovation within the public sector. Their study was based in the UK, it was also based from a suppliers’ perspective. Their findings indicate eight present barriers:

1. Procurement capabilities,
2. Management of risk associated with procuring innovations,
3. Buyer-supplier interaction,
4. Public demand for innovation,
5. Tender specifications,
6. Incentives for the supply of innovative solutions,
7. Management of IPR and access to tenders and other

In her early research on the opportunities for innovation through local government procurement Uyarra (2010, p. 40) claim that

“A key barrier to innovation seems to be the lack of skills and expertise needed effectively understand, communicate and help shape the market. A shortage of commercial skills among procurers prevents a more successful engagement with the marketplace to develop closer relationship.”

Early studies by Cox (2001; 2004) depicted that an early engagement in the marketplace strengthen organisational capabilities to develop a closer relationship with suppliers, however, all actors within the market are in competition with each other over the extraction and capture of value and innovation created by operational activities. This means that engaging actively with supply markets requires more than ‘meet the buyer’ events and the publication of a selling guide policy. The confusion as to what PCP, PPI and Innovation Partnerships mean, the where,
the how and the when of application and what rules apply and when and what funding is available for each element.

The literature indicates that the traditional procurement route works for standard purchases but procuring innovation by definition is not traditional and therefore the public sector needs to build a high-level capability that enables them to challenge standard/traditional procurement. Whilst lessons from the private sector may not always apply to the public sector, it is interesting to see what changes take place so that possibly a version of the change could be applied to the public sector which could assist with the closer alignment of both sectors. Inauen and Schenker-Wicki (2011), examine innovation in the private sector and how it has adapted from internal R&D that was kept within the boundaries of the company to a more open arrangement. Open innovation models allow the fostering of collaboration between customers, suppliers and other innovation sources to everyone’s benefit (Edler and Georgiou, 2007).

2.3.2 Procurement strategic approach: Category management (CM)

CM is another strategic approach that has been defined by O’Brien (2012, p. 2) as “...a strategic...process based approach that incorporates many ...aspects of business improvement processes.” CM analyses and reviews spend within different categories and identifies and applies the most appropriate approach to sourcing, evaluating, awarding and contract management (Office of Government Commerce (OGC, 2011). CM within procurement can help drive down the costs of goods and services, reduce risks and create value and an innovative supplier base (local.gov, 2014). If used effectively it can help reduce demand and aggregate spend, achieving positive results (Welsh Local Government, 2014). The chosen approach should include the development of market and supplier knowledge, a detailed specification and act as a force for continuous improvement. This should lead to improvement in value for money (OGC, 2011).

However, an early study by Dussart (1998) asserts that CM is a strategy to mainly reduce costs and waste, and does not put the value of the end user as a priority. O’Brien (2009) asserts that CM could be used as a strategic approach to maximise business profit by adding value. He further identifies that value does not just consider adding activities but a reduction of risk too. By identifying those risks and eliminating them can add value to the final end goods or service. CM within local authorities can increase value from areas of spend, and help achieve savings
in turbulent times, by understanding suppliers and client department, demands and spend (WLG, 2014).

CM was originally a retailing concept that has emerged from the Efficient Customer Response (ECF). CM has in the last decade been adopted for procurement in both the public and private sector, the rationale is however still similar with stakeholder involvement being key, (Bilk, 2012). Lindblom *et al.*, (2009) explains that CM involves categorising goods with similarities and treating them as individual strategic business units in order to achieve efficiency savings. Cousins *et al.*, (2008) define a purchasing category as a group of products and services that come from the same supplier market.

However, scholars assert that there is little agreement on what CM is and how to implement it (Dussart, 1998). This has been supported by O’Brien’s (2009; 2012) work claiming that because CM was originally used in retail and marketing it is still emerging as a purchasing management technique. It enables managers to focus on deep analysis of the market to fully inform them before making any decisions that may affect the whole company (CIPS, 2015). An early study by Steiner (2001) claims that in using a CM approach, what would previously have been private information is now shared in the supply chain in the hope of cutting costs and increasing margins. Webb (2014) describes the following as key features of category management:

- Whole company support of the process,
- Working cross functionally,
- Consistent application of standard tools,
- Early stakeholder engagement,
- Creation of documented category strategies,
- Engaging with external market,
- Addressing all sources of value creation.

These features are considerably different to the old transactional role of procurement. It will take time to implement such a management process because it may include a complete restructure of an organisation, and culture as category management is a centralised approach. This approach involves a lot of activities that will need resources allocated to them to ensure that CM is implemented properly.
Although, O’Brien (2009) asserts that CM has a start and potentially end point it is fundamentally a series of circular processes. When maturity of process is reached and improvement has been realized, it is necessary to start the process of ageing because the business environment is complex and the market and organisations are constantly changing. Which means that these processes are repetitive. O’Brien has come up with five separate stages of CM as shown in Figure 12 known as the five ‘I’s. However, procurement organisations using CM have developed much variation with different labels and stages. The critical success factors identified by O’Brien are; (1) only one unified process should be in place within the organisation, (2) Purchasing staff should understand and actively embrace it, (3) the language and terminology used should fit with the organisational culture, (4) they should broadly follow and reflect the fundamentals of CM, change management and “best practice”, and (5) continual improvement (2009, p. 42). Although, the full process of CM could be seen as complex. O’Brien argues that the diagram contains higher –level and supporting details in each of the stages.

![Five stages of category management. Source: Adapted from O’Brien (2009, p. 42)](Image)

Alternatively, Future Purchasing (2015) suggests a 5-stage model to implement CM, shown in Figure 12. This model is relatively simple and easy to understand; however, it does not show the complications involved in each stage. Each stage will be time consuming and costly but it is crucial each stage is carried out to ensure implementation is successful. Figure 13 provide a guidance on the implementation approach since if the stages are not undertaken correctly it can result in inconsistencies with no real structure, which may prevent an organisation realising the full benefits of CM.
CM has the potential to save on the purchasing bill for local government i.e. Cardiff Council spends more than £350 million each year on bought-in goods, services and works. The council delivered £18m savings over 5 years using CM as a vehicle to achieve this target. This indicates that CM has potential to save on the purchasing bill. However, the literature does discuss many barriers to be implementing this management system, and bad implementation can then lead to CM not delivering what is expected. As mentioned in Chapter 1 one of the barriers highlighted by the William’s Report (2014) is a lack of capabilities and capacity, particularly individual and management capabilities, to function effectively at both the strategic and operational level. This has become a major issue for small organisations.

Figure 13: Category Management Implementation. Source: Future Purchasing (2015)

CM however challenges this as it suggests that all purchases are important and should be categorized and then a specialist buyer should be allocated to manage each category, in order to achieve savings across the organisation. This again shows how views on procurement are changing; organisations are now realising that it is not only strategic items that money can be saved on but also everything that is procured.

Hesping and Schiele (2015) state that formulating a single strategy to cover all purchasing done within an organisation is difficult as different types of purchases have different strategic requirements in order to make them efficient. CM may be a solution to this as areas of spend are categorised and specialised strategies are developed to suit the needs of each individual
category. Having procurement carried out by specialists within a category will be advantageous as the specialist should be aware of the supply market and understand what is involved from a technical and procurement viewpoint. NPS is a good example of where specialist buyers are creating huge savings as highlighted previously. However, it could be suggested that only allowing a specialised individual or team to undertake procurements for a category is risky because if they leave the organisation their expertise leaves with them and other employees within the organisation will not be able to fill their role if they have not worked within the category. It can also be limiting to an employee’s career if they are only working within one area of procurement as that is the only experience they will have and other potential employers may be looking for more rounded candidates.

Implementing purchasing CM can be risky as it is a relatively new purchasing concept. The way the categories themselves are formulated is highly important as what is grouped together will determine the flexibility and potential savings. This achievable process will require specialists to analyse what areas of spend should go together and if it is done incorrectly benefits may not be realised (Monczka and Markham, 2007). Green (2015) undertook research that uncovered that only 5% of the 350 organisations involved felt their CM approach was fully optimised even though 75% counted it as a top priority. Lack of training could be a factor contributing to this, however public procurements is usually time constrained and there may just not be enough time for the in-depth market research or training required.

Adopting a CM approach is not easy as it requires drastic business process changes for both the organisation and their suppliers (Kaipia and Tanskanen, 2003). Resistance to change is inevitable when making such a major change to strategy and structures and this can impact the success of implementing a new strategy. This resistance may come from lack of knowledge or fear of change, regardless resistance should be minimised by educating and involving employees so that they are comfortable and on board (Fernando, 2017). Meier et al., (2013) suggest that employees may accept change but reject the new processes involved in implementing the change, which can result in failure if the education process is not managed correctly. Change management is crucial when implementing CM as it can involve a complete restructure of an organisation, which inevitably will face some resistance. As a result of this top management has to be fully committed and involved during the implementation stage, which may be a challenge, as they may not be purchasing professionals, and therefore not see a purchasing strategy as a top priority. Implementing a new strategy such as CM can be risky
so senior management should be heavily involved in order to minimise these risks, but gaining their commitment if they lack knowledge can be difficult (Wong, 2013).

Cox (2015) claims that CM is a strategic procurement approach that requires a new ‘paradigm’ about how to undertake it. This has become even challenging making resonance to the growing evidence of a contradicting methodology used between influential academics and consultants and the reality of professional management practice. Similar to Monczka et al., (2005); Carter (2006); Flynn (2006); Cousins et al., (2008); O’Brien (2009); Van Weele (2009); Lysons and Farrington, (2012) he also refers to the Purchasing Portfolio Analysis (Kraljic, 1983) as a most commonly used methodology for undertaking CM. The methodology suggests four sourcing strategies: (1) Strategic – developing long-term collaborative relationship; (2) Leverage – regularly market test and bid volumes; (3) Bottleneck – assure supply; (4) noncritical – reduce transaction costs. However, more recently, the method have been adapted. i.e. AT Kearney came up with the Purchasing Chessboard (Schuh et al., 2008). The method has significant analytical differences with the Kraljic’s model, although, essentially operate with the same conceptual paradigm in context of strategic sourcing. Given this, despite the differences in an analytical methodologies those who believe that CM is the way forward for the development of strategic procurement have ground for hope.

O’Brien (2010) highlights many advantages to adopting a CM approach to purchasing including: Raising the profile of procurement within an organisation; Potential major savings; improved service levels; Effective use of resources; Standardisation of documents; Stakeholder involvement. As previously communicating the perceived value of procurement is important to gain interest throughout the organisation and CM hopes to put it as a focal point to achieve this but rejection of the importance of procurement will make implementing any purchasing strategy difficult. Research carried out by Future Purchasing (2015) claims that companies that have implemented CM are saving around 12.4% of spend with this percentage continually increasing as organisations put more effort and focus into their CM approach, also boosting their performance operational by 49% savings. This shows that savings are being achieved through CM.

The above indicates that CM forces an organisation to allocate resources effectively which should result in higher levels of service as long as the resources allocated are adequate which may be a challenge during the implementation stage. Stakeholder involvement is more
accessible with the use of standardised documentation in the procurement process, which ensures that stakeholders’ needs are met. Standardisation is also beneficial to suppliers who will become used to the documents as they should be the same each time they tender which should make them less complex and time consuming to complete.

The law of diminishing returns also needs to be considered. Brue (1993) explains that the law of diminishing returns is an economic theory that suggests that eventually savings opportunities will reduce over time if the same strategy is used. This means that while initially CM can potentially allow for great savings opportunities unless new suppliers enter the market it will be difficult to keep saving money in the long run. This does not mean that the strategy is worthless as it still has the potential to initially significantly reduce costs for an authority but it may not be able to do it consistently over time.

From this it is evident that CM has the potential to achieve great benefits for an organisation but this is only possible if the entire organisation is on board and the implementation is done correctly. The organisation needs to be able to communicate effectively and work cross functionally to reach maximum benefits. This approach has already shown benefits being achieved by local authorities as their variety of spends is vast and categorising this will allow specialist buyers to achieve cost savings and streamline procurement (O’Brien, 2012).

In summary, from the literature observed it can be identified that procurement as a function has evolved over time (Tassabehji and Moorhouse, 2008) and has become a big part of organisational strategy both in the public and private sectors (Paulraj et al., 2006). Procurement has moved from just obtaining goods works or services (Murray, 2009) to a strategic function focused on value to achieve CA (Noonan and Wallace, 2004; Tassabehji and Moorhouse, 2008). This is due to internationalisation, which has made competition within markets strong, and increased innovation within organisations (Narasimham and Das, 2001; Ubeda et al., 2014). The evolvement has increased the need for a new approach towards the skills set and capabilities within procurement, and such skills as technical, interpersonal and external enterprise are now fundamental (Tassabehji and Moorhouse, 2008). Strategies to manage current challenges within public sector procurement help identify the responsibility for obtaining resources and results (Llewellyn and Tappin, 2003). However, these strategies are not ‘rooted’ within public sector management and strategies have to be innovative and adapt to public processes and procedures (Dereli, 2003). Authorities are thinking of new ways to
perform processes, and finding them even harder to apply (Llewellyn and Tappin, 2003). Strategies such as; ‘lean thinking’ (Tummala et al., 2006), performance measures (Vries, 2010) and CM (O’Brien, 2009) have been used within local authorities. However, it has been identified that one approach may not be suitable to all authorities or to different environments. There may be a shift in need or demand to which the strategy would have to adapt (Conteh, 2012).

In the light of the observation over the last few decades, the literature suggests that DCs provide sources for superior long-run business performance and sustainable competitive advantages (e.g. Teece, 2007; Zollo and Winter, 2002; Andreeva and Chaika, 2006). The interest in DCs has led to an increased understanding of the nature of DCs in non-traditional sectors such as the service context. Very limited work pertinent to services has focused on DCs in a procurement context (Li, 2013; and Hartmann et al., 2014). Li and Georghiou (2016) discussed broadly the concept in the context of public procurement. Whereas, Hartmann et al., (2014) look at it in the context of private sector procurement aiming to examine the change in the interactions between buyers and suppliers, the emergence of value creation and capability development during the transition process. However, a significant gap still exists in our knowledge of the application of DCs in the public sector context. The theory of DCs was introduced in the works of Teece and Pisano (1994), Teece et al., (1997), Eisenhardt and Martin (2000), Winter (2003) and Helfat et al., (2007). The ongoing debate on DCs has had a dramatic influence on organisation level research (Zott, 2003; Drnevich and Kriauciuunas, 2011). Indeed, DCs can exist in several functional areas of firms (Morgan et al., 2009). In recent research, scholars have begun to emphasise the role of DCs in public sector organisations (Lee, 2001; Daniel and Wilson, 2003; Carmeli and Tishler, 2004; McNulty and Ferlie, 2004; Jas and Skelcher, 2005; Jones et al., 2005; Ridder et al., 2005; Vera and Crossan, 2005; Ridder et al., 2007; Wilson and Daniel 2007; Easterby-Smith et al., 2008; Piening, 2011; Salge, 2011). However, only studies by Carmeli and Trisher (2004) and Jas and Skelcher (2005) looked at microfoundations and effects/antecedents of DCs in the context of local authorities. This clearly indicates a lack of research demonstrating an appropriate conceptualisation and operationalisation of DCs.

PSP continually has been at the centre of the recent discussion on innovation policy at both European and National level (Aho et al., 2006). The literature has been scrutinised outlining a number of implications for the thesis, including the discussion of the current processes, and
current strategic approaches with intention to understand ‘how’ DCs have been used in terms of strategic conversions. This is in line with the study by Hult et al., (2004) and Ordanini and Rubera (2008, p. 28) claiming that the main focus of procurement research to date is on ‘what’ procurement should do rather than ‘how’ these goals could be achieved. The literature is silent on which capabilities and managerial processes should be developed to innovate and transform procurement from a clerical to a strategic position that connects organisation strategy with day-to-day operations (Mena et al., 2014). This is sufficient since the literature suggests that the paradigm of public-sector procurement is changing from a clerical/administrative activity into a strategic function (Syson, 1989; Beukers et al., 2006; Mena, et al., 2014) with a rise in its strategic importance (Carr and Smeltzer, 1997; Tassabehji and Moorhouse, 2008) engaging with activities that shape organisational strategy, transform and leading supply chain towards sustainable competitive advantage (Carr and Pearson, 2002; Mena et al., 2014), and deliver strategic benefit (White et al., 2016). However, transformation requires high-order capabilities (Yen et al., 2012) that are the focus of this study.

Nonetheless, the literature in both fields indicates a rise in strategic importance due to environmental shifts towards quasi-markets (Neihaves and Plattfaut, 2014). The complexity of the environment and its pressures at both a domestic and global level have required governments to seek better performance from the public sector, focusing on the improvement of public sector procurement efficiency, effectiveness, and outcomes (Callender and Matthew, 2002). The public sector is under pressure to deliver higher performance with less resources focusing on value-for-money and fit-for-purpose outcomes (Schapper et al., 2006). Despite the increasing effort in practice and research support from academia, ad hoc procurement process change initiative shows little sustainability and long-term success often lags behind the expectation (Neihaves and Plattfaut, 2014). Therefore, the researcher contends that the DCs perspective can provide a useful theoretical lens to understand how public procurement in the local authorities in Wales use DCs in term of strategic conversation, particularly focusing on the development of microfoundation drawing up on the framework developed by Teece (2007).

2.4 Chapter summary and conclusion

2.4.1 The Composition of a Conceptual Framework

The development of a rich theoretical framework for establishing the main research questions, through exploring the underlying conditions and contextual factors under which a
phenomenon is likely or unlikely to occur (Yin 2004). Drawing from the literature review, the concept of DCs and strategic procurement are formally defined. Two concepts are central to this research, public procurement strategic activities and DCs clusters: sensing, seizing, and transforming. Given the dynamic nature of public-sector procurement traditional strategic approaches have proven to be slightly dysfunctional. Therefore, LAs need to challenge the traditional approach in order to deliver a better result with restricted resources. The DCs perspective offers a feasible solution. This study proposes that public sector procurement enhances its performance through developing high-level capabilities. The performance outcome could be determined by their ability to use DCs in strategic conversion. Particularly, focusing on the elements of ecosystem for sensing opportunities, seizing those opportunities, and transforming drawing on Teece’s (2007) view. Teece makes regular reference to ‘opportunities’ and ‘threats’ around which the capacities of sensing, seizing and reconfiguration are ‘shaped’ and ‘reshaped’ (2007).

**Sensing capabilities** - allow firms to spot opportunities and threats in the market. They may underpin the development of new products, a sophisticated research and development capability. Organisations must extend the sensing activity ‘to the periphery of their business ecosystem’ and embrace a range of ‘potential collaborators – customers, suppliers, complementary’ (Teece, 2007);

**Seizing capabilities** - are associated with the ability of the organisation to build new competencies or the implementation of new ‘business models’, which respond to specific opportunities (Teece, 2007);

**Transforming** - is wider in scope and exercised less frequently than seizing. It seeks to retain the organisation’s ‘evolutionary fitness’. It embraces ‘the ability to recombine and to reconfigure assets and organisational structures as the enterprise grows, and as markets change’ (Teece, 2007). It includes the realignment of the organisation through acquisitions and mergers. Both aspects of the mode are reflected in the example of Cisco, whose decentralised, relatively flat management structure facilitated the acquisition and integration of 136 businesses over a ten-year period, without any significant loss of impetus (Helfat et al., 2007).

The development of the conceptual framework shown in Figure 14 is a logiced and necessary step in making sense of integrating and rearranging the research ideas. Santos (1999) suggests
that without a framework it is virtually impossible to codify existing knowledge in the field in a coherent manner. Santos further claims that the conceptual framework can help the researcher to discern the gaps between existing knowledge and ongoing research. Correspondingly, Miles and Huberman (1994) contend that a conceptual framework is best done graphically making explicit what is already on a researcher’s mind. They further claimed that it is a direct step to research question(s).

The conceptual framework provides a general context to explore the cases selected. It also allows for the analysis of microfoundations relevant to strategic public sector procurement in the LAs selected.

**Figure 14: The Research Conceptual Framework**

**2.4.2 Central Research Question**

The research framework established (Section 2.4.1) by the Aim and Objectives outlined the scope of this study. Based on the critical evaluation of the literature review (Chapter 2) the following Central Research Question (CRQ) has emerged:

“How public-sector organisations use DCs in strategic conversion processes?”
Three Supportive Research Questions (SRQ) underpins the CRQ that are:

1. What are the analytical systems and individual capabilities that will enable procurement teams to sense, filter, shape and calibrate opportunities?
2. What are current procurement structure, procedures, and incentives to seize opportunities?
3. How do WLAs procurement deliver more with less resources as service demands increase?

This focuses the research to both ensure clarity of purpose and guide the development of the research methodology and strategy.

2.4.3 Conclusion

This chapter has reviewed the literature related to DCs and PSP demonstrating the theoretical background and the current state of knowledge. First, the chapter offers insights into the literature review approach explain the rational for methods underpinning the review followed by the search criteria, keywords glossary synopsis and the logic of the chapter. Second, the conceptual development of DCs is discussed with particular focus on description of the relevant literature to DCs’ conceptualisation, issues regarding its terminology and operationalization, as well as its components. This includes a discussion of various influential schools drawing particular attention to the conceptual framework developed by Teece (2007) that disaggregates DCs into three main clusters: sensing, seizing, and transforming intending to answer the central research question. Third, it offers insights into PSP discussing the strategic procurement approaches particularly procurement innovation and CM providing a comprehensive view of procurement strategic activities. Finally, a conceptual framework has been developed to present the critical constructs of this research, as well as the connections between each. An overview of the literature and the research framework has formed the basis for developing the central research questions.
CHAPTER 3: RESEARCH METHODOLOGY

“...research should not be methodologically led, rather that methodological choice should be consequential to the researcher’s philosophical stance and the social science phenomenon to be investigated”

(Holden and Lynch 2004, p. 2)

3.0 INTRODUCTION

The literature review indicates the transformation of procurement from a clerical activity into a strategic function (Mena et al., 2014). Public procurement organisations are confronted with demand to drive innovation (Edler and Georghiou, 2007), enhance their efficiency and effectiveness under austerity and the rising demand for services (Boyne et al., 2005; Mack et al., 2008; Radnor, 2010). The emerging field of DCs provides a relatively new perspective from which to approach service innovation (Kindstrom, et al., 2012). This constitutes a significant need for the researcher to increase knowledge and understanding of DCs in the context of public procurement since in the private sector literature, the DCs approach has become a prevalent theoretical framework (Piening, 2012) for analysing how firms enhance performance and achieve competitive advantage in a volatile environment (Teece et al., 1997; Teece, 2007; Teece, 2009; Feiler and Teece, 2014). Accordingly, this chapter builds on the established central research question (CRQ) to discuss and defend the philosophical underpinning with reference to the key stance: epistemology and ontology. Whilst also clarifying and defending, the research approach, research strategy, methodological choice, and data collection and analysing techniques, and explaining the practical application of these methods in the field.

3.1 The Philosophical Constructs of Research

A review of philosophy is a vital aspect of the research process that enables the researcher to understand the whole spectrum of possibilities, which can lead to both enrichment of research skills and an enhancement of the confidence that the researcher is using an appropriate methodology. Saunders et al., (2012) state that this overarching term relates to the development of knowledge and the nature of that knowledge. Alternatively, Brannen (2005, p. 7) stated that “...the researchers’ choice of methods is...driven by the philosophical assumptions –ontological and epistemological...” Holden and Lynch (2004) notes that central to the questions of ‘How to research?’ and ‘What to research?’ is the researchers’ perception
on ‘Why research?’’. This perspective is based on the researcher’s assumption concerning the inter-related concepts of ontology and epistemology. Research philosophy is regarded as a crucial parameter to ‘Why research?’ If the researcher does not perceive that there is a reality, the utilization of nomothetic methodology (Burrell and Morgan, 1997) contradicts the philosophical underpinning of the thesis. However, Hughes and Sharrock (1997, p. 94) argued that

“…researchers do not worry about epistemology and ontology but about particular problems they confront from their theories and investigations…all it matters is that scientists go about their business…using methods appropriate to the problems they have to deal with, then philosophical worries about ontology and epistemology are irrelevant”.

While accepting contradicting views research is pivotal to both academic and business activities alike, an all-encompassing agreement regarding how it should be ‘defined’ within literature is elusive.

Brannen (2005; 2008) notes that many aspects of professional research are in fact leading towards a greater divide between quantitative and qualitative approaches. The perception that qualitative and quantitative research is distinct is that they are said to be based on different philosophical assumptions (Brannen, 2015). The debate surrounding the selection and use of qualitative and / or quantitative research methodologies has been intense, and has evolved to include a mixed-methods approach (Hickson, 2011). It is not intended that this thesis will enter into that debate, but will reference it to demonstrate why a qualitative research approach has been selected for this research topic. Although, Morgan and Smircich (2003) argue that qualitative research is an approach rather than a particular set or techniques and that its appropriateness derives from the nature of the social phenomena to be explored. In relating the criticisms that Bourdieu’s (1990a) reflexive sociology has received, Kyung-Man (2009, p. 76) asserts, “science is…replete with struggles for power, hegemony and dominance.” Several sociologists i.e. Bourdieu and Wacquant (1992), Wacquant (1998) and Giddens et al., (2009) may not agree on the causal mechanisms for such dissonance but all identify that ontological and epistemological dominances or fetishes are determined by many things other than the search for absolute truth. Bourdieu and Wacquant (1992, p. 225) rejected the division between theory (absolute truth) and methodology since they were convinced that “one cannot return to the concrete by combining two abstractions.”
The literature indicates numerous arguments against particular paradigms of science by proponents of the competing perspectives. Most notably the epistemological discussion revolving around deductive versus inductive methods (Saunders et al., 2012) For example, Morgan and Smircich (1980, p. 498) note that social scientists, in using “quantitative approaches...are in effect attempting to freeze the social world into structured immobility” and assert that in open (social) systems “scientists can no longer remain as extended observers”. Brannen (2005) even notes that the ongoing practice of, and preference for, particular methods or approaches serves to structure the epistemological and ontological functionalist divide, thereby further limiting the opportunity for methodological convergence.

However, there is a consensus from the various offerings that research is an investigation or a process of enquiry which always starts with a question and it is a systematic and methodical way of finding the answer to that question with a view to increasing knowledge (Collis and Hussey, 2003; 2009) that is often guided by the theories and research of others (Trochim, 2006). Collis and Hussey (2009, p.3) define research as “a systematic methodological process of enquiry and investigation with a view to increasing knowledge”. Remenyi et al., (1998) adds that research is usually done in order to make additions to incomplete data and is usually meant to provide value adding information to the already existing knowledge on the subject by trying to solve existing unanswered questions or problems.

Saunders et al., (2012) argued that a research philosophy depends upon the researchers’ standpoint with regard to the development of knowledge involving two key concepts: Ontology and Epistemology. Both concepts relate to each other, but in various ways, depending on the more general philosophical position of the research (Collins and Hussey, 2003). Hence, the philosophical stance of any research is formed from the ontological and epistemological positions regarding the manner in which data should be gathered, analysed and ultimately used. Hatch and Cunliffe (2006) and Bryman and Bell (2007) highlight the nature of the dependence between ontology and epistemology: if the researcher embraces a particular ontological position this will affect their epistemological choices. Furthermore, the philosophical standpoint adapted by any research study has also a major impact upon methodology and methodological techniques available to be used, as they must be consistent with the philosophical stance to enable the research question(s) to be meaningfully answered.
3.1.1 Ontological Position: What is the nature of reality?

Ontology is philosophical assumption about the nature of reality (Saunders et al., 2012; Easterby-Smith et al., 2015). The philosophical approach enables the researcher to answer, ‘What is there in the world?’ (Eriksson and Kovalainen, 2016, p.14). It concerns the idea about the existence of a relationship between people, society and the world in general (Collins and Hussey, 2003; Eriksson and Kovalainen, 2016), raising the questions on the assumptions researchers have about the way the world operates and the commitment to a particular view (Fleetwood, 2005; Saunders et al., 2012) and ‘what exists’ (Blaikie, 2004a; b). Bryman and Bell (2007, p. 19) claim,

“…ontology is concern with the nature of enteritis. The central point of orientation here is the question whether social entities can and should be considered objective entities that has a reality external to social actors, or whether they can and should be considered as socially construction, build up from perceptions and actions of social actors.”

Alternatively, Saunders et al (2006; 2012) in the same line of Burrell and Morgan (1979) explains that ontology is concerned with the questions; ‘What should be looked at and what is irrelevant?’ ‘What do we believe to be true?’ and ‘What do we know?’. In other words, ontology concerns the nature of reality, what really exists? What can be really known? Specifically, it asks is reality subjective i.e. created in our mind (intangible) or is it objective i.e. really exists externally (tangible). Alternatively, Bryman and Bell (2010, p. 19, 20) described ontological positions respectively as “objectivism” and “constructionism”. They see objectivism from a different viewpoint defining it as “...an ontological position that asserts that social phenomena and their meanings have an existence that is independent of social actors.” In this context they consider an organisation as a tangible object that has its rules and regulations and adopts standardised procedures to get things done.

However, an early study by Guba and Lincoln (1994, p. 108) has posed questions about the research ontological position such as “what the form and nature of reality is” and “what can be known about it.” In answering these questions regarding the ontological position of this study, this study believes in the existence of multiple realities not just one, realities that are not constructed by the knower but also can be altered by them. Reality is subjective as opposed to
being objectively determined, it is not something ‘out there’ but instead something that is specific and locally constructed. The ontological assumption can be deeply embedded and can affect how an individual attributes a mode or manner of existence to one set of things over another. If these underpinning presumptions are not acknowledged and considered, certain phenomena may be taken for granted as they are implicitly assumed and left unquestioned.

Collins and Hussey, (2009, 2013) and Eriksson and Kovalainen (2015) state that an ontological assumption embraces all theories and methodological assumptions. i.e. the qualitative research approach could be based on ontological assumptions and perceptions and experience that may be different from each other and change over time and context, in which reality is understood as subjective. In contrast, in quantitative research the social world exists as distinctive and separate. The world has existence independently of people and their actions and activities. However, for the purpose of this thesis its reality is understood as subjective since it views DCs as a fundamental properties in the social world of local authorities. This approach has been widely accepted since it calls on valid knowledge from many researchers (Saunders et al., 2012).

3.1.2 Epistemological Position: What is considered acceptable knowledge?

Ontological claims in research are closely related to epistemological claims and usually are discussed together (Collins and Hussey, 2008; Eriksson and Kovalainen, 2015). Their studies also find correlations between both philosophical positions asserting that if ontology focuses on the question ‘What is there in the world?’, it is sufficient to understand what epistemology in research means. Easterby-Smith et al., (2015) claim that ontology is about the nature of reality and existence; epistemology is about the theory of knowledge that helps the researcher to understand and establish suitable methods of inquiry into the nature of the world.

Epistemology is the study of the nature of knowledge and the way of bringing it into the physical and social worlds (Easterby-Smith et al., 2015). Eriksson and Kovalainen (2015, p. 15) claim that epistemology is concerned with the questions ‘What is knowledge?’ and ‘What are the source and limits of knowledge?’. Similarly to their view, Rosenau (1992), Hughes and Sharrock (1997) and Cope (2002, p. 43) viewed epistemology as “a theory of knowledge with specific reference to the limits and validity of knowledge”. i.e. the literature review indicates that DCs literature has yet to clearly recognise the epistemological distinction between ordinary
capabilities and dynamic capabilities this is one of the key issues that the knowledge in the DCs field is not widely accepted.

In a similar manner to ontology, objective and subjective epistemological positions exists. Holden and Lynch (2004) discussed alternative philosophical paradigms. They asserted that objectivism and subjectivism have been described as a continuum’s polar opposites with varying philosophical positions aligned between them. The objectivist approach to social research developed from natural science phenomena. However, subjectivism arose as critics argued, and continue to argue that both sciences are disparate. Eriksson and Kovalainen (2015) explain that the subject view in epistemology represent the possibility of existence of the external and neutral world, unlike the subjective epistemological view, no access to the external world beyond our own observations and interpretation is possible.

Alternatively, an early study by Easterby-Smith et al., (1991) entitled them as positivism and phenomenology, whereas, Hughes and Shamrock (1997) described them as positivism and interpretivism as discussed in more detail in section 3.3. However, Bryman and Bell (2007) asserted that an epistemological issue concerns the question of what is (should be) regarded as acceptable knowledge in a discipline. A particular issue in this context is the question of whether the social world can and should be studied according to the same principals, procedures, and ethos as a nature science. Although, the position that affirms the importance of imitating the natural sciences is invariably associated with an epistemological position known as positivism (Bryman and Bell, 2007) that is not relevant to the study.

Eriksson and Kovalainen (2015) explained that objective epistemology relates to a world that is both independent and theory neutral, while subjective epistemology is based on an individual’s own interpretation and observation. However, Lincoln and Guba (1994, p. 108) have enquired regarding “what is the nature of relationship between the knower... and what can be known?” The answer given to this question is constrained by the answer already given to the ontological question; that is, not just any relationship can now be assumed. For example, the real reality is assumed, and then the assumption of the knower must be one of objectives detached or value freedom in order to be able to discover “how things really are” and “how things really work”. In this context, the role of the researcher has been the focus of discussion in literature. An early study by Polkinghorne (1983) considered research as a human activity, one in which the researcher as knower is pivotal. Similarly, Denzin and Lincoln (2000)
regarded the researcher and their respondents as being linked in the co-creation of findings, with the researcher as a ‘passionate’ participant. Therefore, in reply to Lincoln and Guba (1994) the epistemological position of this study is that the research has engaged with various research projects commissioned by Value Wales, Welsh Government Organisation aiming to understand the level of skills and capacities in public procurement organisations in Wales, and it is expected that prior knowledge and interpretation gained from the research projects will affect the research findings. Indeed, the belief and opinion regarding value free research has been questioned and its pursuits criticised as limiting knowledge about human experience and especially meaning making (Cotterill and Letherby, 1993).

However, Holden and Lynch (2004, p. 8) argued, “...some research methods that the reader may have considered belonging strictly to either an objective or subjective philosophical approach can have a dual utilization.” For instance, as exemplified by Remenyi et al., (1998), case studies, which involve in-depth interviews, have often been considered to be a qualitative method. However, increasingly, researchers who utilise this method have quantified case study themes employing an encoding process. This encoding lends itself to statistical analysis of the case-study results.

3.2 Research Paradigm

Bryman (2004, p. 453) considered a paradigm to be “...a cluster of believes...”, which in academic research dictates how much research ought to be conducted and the manner in which the ensuing results need to be interpreted. Collins and Hussey (2009) state that pragmatism advocates a freedom to mix methods from different paradigms and choose them on the bases of their appropriateness to answer the research question. This indicates that the combination of qualitative and quantitative methods leads to better results. Onwuegbuzie and Leech (2005), further promote the advantages of pragmatism in research also suggesting that qualitative and quantitative approaches can be complementary. This is further expanded by Delattre et al., (2009) who similarly postulate that a quantitative approach can be utilised for establishing and validating the outcomes of qualitative research providing rigour to the research indicating that qualitative research is less rigorous. However, the most important determination of the research position on each of the continua is the research question(s) – one position may be more appropriate than another for answering a particular question. This suggests that by ignoring the
debate about reality and the nature of the knowledge the weakness of one paradigm could be offset against the strengths of on other.

Although, Saunders et al., (2012) argue that pragmatism recognises that there are many different ways to interpreting the world and undertaking research, that no single point of view that can ever give the entire picture and that there may be multiple realities. This does not mean that pragmatists always use multiple methods, rather they use the method or methods that enable credible, well-founded, reliable and relevant data to be collected that advance the research (Kelemen and Rumens, 2008). Another study by Bryman and Bell (2007) suggests that one philosophy could be more suitable than another for each individual research question in the process of research. This could be translated as the pragmatic approach to science involving using the methods that appear best suited to the research problem and engaging in philosophical debates identifying the best approach. Traditionally, in social and behaviour science such paradigms have fallen into two opposing philosophical positions; positivism and interpretivism (Bryman and Bell, 2007; Saunders et al., 2012; Easterby-Smith et al., 2015).

3.2.1 Contrasting Traditions: Positivism versus Interpretivism

Easterby-Smith et al., (2015) argue that there are 2 contrasting views of how social research should be conducted, notably the traditions of positivism and interpretivism. These competing perspectives are aptly described as in the red corner positivism: and in the blue corner social constructionism. Such phraseology is perhaps more akin to a boxing match than an epistemological discussion, but none-the-less this metaphorical expression serves to adequately illustrate the opposing positions, which have each to some extent been elevated into a stereotype, with critical realism somewhere in the moderate-middle. That said, “When one looks at the practice of research, even self-confessed extremists do not hold consistently, to one position or the other” (Easterby-Smith et al., 2008, p. 22). This suggests that the process of situating a research study within a given philosophical domain is to some extent subjective irrespective of the epistemological and ontological perspectives adopted (Bryman and Bell 2007; Easterby-Smith et al., 2008; Saunders et al., 2007).

3.2.1.1 Positivism

Positivism is an epistemological position that knowledge is obtained through applying scientific methods or 'science research', and is "based on the rationalistic, empiricist
that originated with Aristotle, Francis Bacon, John Locke, August Comte, and Emmanuel Kant” (Mertens, 2005, p. 8) to experiences and to the empirical world (Eriksson and Kovalainen, 2016). It advocates the application of the methods of natural science to the study of social reality and beyond (Bryman and Bell, 2007; Saunders et al., 2007, 2012; Easterby-Smith et al., 2015). It "reflects a deterministic philosophy in which causes probably determine effects or outcomes" (Creswell, 2003, p.7). The key idea of positivism is that the social world exists externally, as a result it properties can be measured through objective methods rather than being inferred subjectively through sensation, reflection or intuition (Saunders et al., 2012; Gray, 2014; Easterby-Smith et al., 2015).

An early study by Kolakowski (1972) argues that positivism stands for a certain philosophical attitude to human knowledge: strictly speaking, it does not prejudge questions about how men (and women) arrive at knowledge, neither the psychological nor the historical foundations of knowledge. However, it is a collection of rules and evaluative criteria referring to human knowledge, which tells us what kind of contents in our statements about the world deserve the name knowledge and supplies us with norms that make it possible to distinguish between that which may and may not reasonably be asked (ibid). Positivism consists of three main principles; (1) reality consists of what is available to the sense; (2) inquiry should be based upon scientific observation and therefore on empirical inquiry; and (3) that natural and human sciences share common logical and methodological principals, dealing with facts and not with values (Gray, 2014). A study by Hacking (1999) defines seven characteristics of positivism namely, the belief in realism, demarcation, cumulative science, observation-theory distinction, observation and experimentation as the foundations for and justification of hypotheses and theories, deduction, precision, justification and context of discovery and unity of science.

Another earlier study by Kolakowski (1972) claims that positivism embraces a four-point doctrine: (1) the rule of phenomenalism which asserts that there is only experience; all subjective abstractions have to be rejected; (2) the rule of nominalism which asserts that words, generalizations, abstractions, are linguistic phenomena and do not give new insights into the world; (3) the separation of facts from the values; and (4) the unity of the scientific methods. Alternatively, Burrell and Morgan (1997) defined it as an epistemology, which, seeks to explain and predict what happens in the social world by searching for regularities and casual relationship between its constituent elements. In the same line Mays and Pope (2000) assert that when applied in the research context, positivism aims to investigate people’s behaviour in
terms of cause and effect, as well as predicting such behaviour. Moreover, Easterby Smith et al., (2015, p. 52) summarised the philosophical assumptions of positivism based on eight variables; independence, value-freedom, causality, hypothesis and deduction, operationalisation, reductionism, generalisation, and cross-sectional analysis as shown in Table 19.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>The observer must be independent from what is being observed.</td>
</tr>
<tr>
<td>Value - freedom</td>
<td>The choice of what to study, and how to study it, can be determined by objective criteria rather than human beliefs and interest.</td>
</tr>
<tr>
<td>Causality</td>
<td>The aim of the social sciences should be to identify causal explanation and fundamental laws that explain regularities in human social behaviour.</td>
</tr>
<tr>
<td>Hypothesis and deduction</td>
<td>Science proceeds through a process of hypothesising fundamental laws and then deducing what kinds of observations will demonstrate the truth or falsity of these hypothesis.</td>
</tr>
<tr>
<td>Operationalisation</td>
<td>Concepts need to be defined in the way that enable facts to be measured quantitatively.</td>
</tr>
<tr>
<td>Reductionism</td>
<td>Problems as a whole are better understood if they are reduced into the simplest possible elements.</td>
</tr>
<tr>
<td>Generalisation</td>
<td>In order to move from the specific to the general it is necessary to select random samples to sufficient size, from which the inferences may be drawn about the wide population.</td>
</tr>
<tr>
<td>Cross-sectional analysis</td>
<td>Such regularities most easily be identified by making comparisons of variations about the samples.</td>
</tr>
</tbody>
</table>

Table 19: Philosophical Assumptions of Positivism. Source: Easterby-Smith et al., (2015, p. 51)

The table suggests that positivism is based upon values of reason, truth and validity and there is a focus purely on facts gathered through direct observation and experience and measured empirically using quantitative methods such as surveys and statistical analysis (Blaikie, 1993; Eriksson and Kovalainen, 2008; Easterby-Smith et al., 2008; Hatch and Cunliffe, 2006; Bryman and Bell, 2007; Saunders et al., 2012). When the research conducted is based on objective reality, observed information and statistical data, for the development of knowledge, researchers can be said to be using a positivist philosophy.

Although, Bryman and Bell (2010, p. 14) argue that it goes beyond this principle initiating the following principles; (1) “The principal of phenomenalism” only phenomena and hence knowledge confirmed by sense can be recognised as knowledge, (2) “The principal of
deductivism” the purpose of theory is to generate an hypothesis that can be tested and allow an explanation of a law, (3) “The principal of inductivism” knowledge occurs through the process of gathering facts that provides basis for laws, (4) “The principal for objectivism”, science must be conducted in the way that is value free, and (5) “There is a clear distinction between scientific statements and normative statements and a belief that the former are the true domain of science”. Furthermore, they argue that the doctrine of positivism is extremely difficult to outline in a precise manner because it is used in a different way by each researcher. In other words positivism is synonymous with the natural sciences or observable facts: it is based on the ontology of the world that is external and objective and an epistemology in which the observers are independent.

3.2.1.2 Rejection of Positivist

This study rejects the positivist paradigm as being wholly inappropriate to the stated research aim and objectives. Firstly, of paramount importance is that the author, as an experienced researcher, cannot feasibly adopt an external unbiased position. The author and reality of DCs whatever the ontological perspective, are in this instance deemed inseparable. This contravenes a major tenet of positivism. Also, this study is not seeking to explain or establish casual universal laws, nor collate data on objective phenomena to enable scientific statements to be made: it is searching for something different.

The aim of this study is to “Investigate DCs in strategic procurement activities in Local Authorities in Wales.” This statement arguably constitutes a rejection of the notion of positivistic truth uncovered through empirical scientific experimentation and as such a viewpoint advocates that only phenomena and hence knowledge confirmed by the senses can genuinely be warranted as knowledge (Bryman and Bell, 2011; 2015; Henn et al., 2006; Walsh and Wigens, 2003). Furthermore, the positivist paradigm is rejected in preference of a view that “…knowledge of the world is intentionally constituted through a person’s lived experience…” (Weber, 2004, p. iii). As a consequence, a suitable alternative to positivism is required. Accordingly, the interpretivist paradigm will now be discussed, evaluated and its applicability to this particular study will be demonstrated in order to philosophically locate this study.
## 3.2.2 Interpretivism

Easterby-Smith *et al.*, (2014) claims that interpretivism and positivism are two contrasting views of epistemology. The observation of the research literature indicates that interpretivism is an alternative view to positivism

“... *is predicated up on the view that the strategy is required that respect the differences between people and objects of the natural sciences and therefore required the social scientist to grasp the subject meaning of social action*” (Bryman and Bell, 2011, p. 16).

Similarly, Gray (2014, p. 23) claims that interpretivism assert that natural reality and social reality are different and therefore require different kind of methods. While the natural science looks for consistencies in the data in order to deduce ‘laws’, social science often deals with the actions of the individual. Blaikie (2004a) describe it as post-positivism approach, whereas, Easterby-Smith *et al.*, (2014) as constructivism and anti-positivism. Hatch and Cunliffe (2006) and Gray (2014) indicate that there is a fundamental difference between the subject matters of natural and social science. Blaikie (2004a) advocate that the central tenet of interpretivism is that since there is a fundamental difference between the subject matters of the natural and social science, the methods of natural science cannot be used in social science. Willis (2007) claims that it is not that interpretivism denies the existence of external reality: it is the notion of independent knowable reality that it questions. This could be translated as that the physical and social world have objective, external existence but this is mediated by social interaction, which also has a socially constructive effect; it allows a focus on an understanding of what is happening in the given context. Livesey (2012) has identified three key principals of the interpretive paradigm:

1. The social world is seen to be and reproduced on a daily basis by people going about their lives
2. People actively, if not always consciously or deliberately, create their world
3. The social world is understood by different people in different situations in different ways

Furthermore, Bryman and Bell (2011, p. 16) explain the intellectual heritage of the interpretivism referring to Weber’s notion of ‘*Verstehen*’; the hermeneutic-phenomenological
tradition and symbolic interactionism. In the same line, Saunders et al., (2012, p. 137) associate the intellectual heritage of interpretivism with two main principals; ‘phenomenology’ and ‘symbolic interaction’. Phenomenology refers to how we make sense of the world around us (Bryman and Bell, 2011; Saunders et al., 2012). Symbolic interactionism, however, is a continual process of interpreting the actions of others with whom we interact leading to adjustment of our own meanings (Liamputtong, 2005; Bryman and Bell, 2011; Bryman, 2012; Saunders et al., 2012). Symbolic interactionists argue that interaction takes place in such a way that the individual is continually interpreting the symbolic meaning of his or her environment and acts on the basis of this inputted meaning (Bryman and Bell, 2012).

The notion of socially constructed meaning is often termed post-positivist (Easterby-Smith et al., 2014). Its development was a reaction to the positivist approach to social science enquiry promoting an assumption that individual participants construct social reality (Gall, Gall and Borg, 2006). However, Willis (2007) argues that if this individuality is taken too literally the position leads to the problem of other minds, as the acceptance of this notion raises the question of how 2 people with unique versions can communicate. Fortunately, most interpretivists argue that the making of meaning is a group or social process. Consequently, humans in groups, such as within the strategic public procurement frameworks, construct meaning using the tools and traditions of the group such as culture, language, identities, norms and values, and are thus able to share their understanding (ibid).

Burrell and Morgan’s (1979) model are particularly helpful in summarising and clarifying the philosophical stand; epistemology and ontology relevant to this research. Kelemen and Rumens (2008) argue that the fourfold categorisation of social science paradigms represents the major belief systems of management and business research depending upon their views regarding the ontology of research and the nature of society. Although, three years later Burrell and Morgan (1982) explained the threefold purpose of the paradigms (1) to help researchers to clarify their assumptions towards the nature of science and society, (2) to offer a useful way to understand ways in which other researchers approached their work, and (3) to help researchers to plot their own route through their research, to have a better understanding of where it is possible to go and where they are going.

Figure 15 shows how the four paradigms can be arranged as a matrix corresponding to two conceptual dimensions: subjectivism to objectivism, and the sociology of radical change to the
sociology of regulation developed by Burrell and Morgan (1979) that is still relevant. According to Saunders et al., (2012) radical change relates to judgment about the way organisational affairs should be conducted and suggest the ways in which these affairs may be conducted in order to make fundamental changes to the normal order of things. In other words, the radical change dimension adapts a critical perspective on organisational life. However, using Burrell and Morgan’s model this thesis fits better into the sociology of regulations particularly into the interpretivist approach since the thesis seeks to understand and explain how selected organisations can use DCs in terms of strategic conversion activities. Therefore, it is more relevant to the regulatory perspective since it seeks to explain the way in which organisational affairs are regulated and offers suggestions as how it may be improved within the framework of the way things are done at present (ibid).

![Figure 15: Four Research Paradigms. Source: Burrell and Morgan (1979, p. 5)](image)

Another study by Carson et al., (2001, p. 14) discussed the advantages of interpretivism stating that “…social field phenomena are relative to each other in some way as opposites to seeking to isolate variables in positivist studies adhering to scientific rules”. This philosophical approach is one opposing tradition to positivism since the social world of business and management field is too complex to lend itself to theorizing by a definite ‘law’ in the same way as physical science (Saunders et al., 2012). An interpretive approach makes scientific declarations regarding the social world, while at the same time accepting that human beings and the subject of the natural world are different. From this standpoint, the study of social
science utilises different modes of methodology from those adapted by positivism. Table 20 summaries the above providing insights of the assumptions of the social science.

<table>
<thead>
<tr>
<th>Table 20: Assumptions of Social Science. Source: Adapted from Collins and Hussey (2003); Easterby-Smith et al., (2015, 47); Eriksson and Kovalainen (2016, p. 14)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ontology assumptions</strong></td>
</tr>
<tr>
<td>Reality is objective; it is external to the individual.</td>
</tr>
<tr>
<td><strong>Epistemology assumptions</strong></td>
</tr>
<tr>
<td><strong>Methodological</strong></td>
</tr>
</tbody>
</table>

### 3.2.2.1 The interpretivist paradigm and this study

Mac *et al.*, (2001, p. 32) provide a definition of interpretivist paradigm, which includes three elements: a ‘belief about the nature of knowledge’, a “methodology” and a “criteria for validity.” In this context this study will actively solicit views, opinions and interpretation from six local authorities and the NPS where the senior procurement managers may not recognise the concept and existence of DCs in practice (Pablou and El Sawy, 2011). Although, they use distinct skills, processes, procedure, procurement structure, decision rules and disciplines to address rapidly changing environment and its challenges which actually underpin the concept of DCs - sensing, seizing, and transforming (Teece, 2007). The researcher is concerned with the state of DCs in public procurement organisations. Saunders *et al.*, (2012) suggest that in circumstances such as these, an interpretivist philosophy is suitable to explore the subjective meanings motivating the social actors in order to be able to understand the reality. This has been further supported by Easterby-Smith *et al.*, (2015) suggesting that the strength of interpretivism lies in the ability to at change processes over time, to understand people’s
meanings, to adjust to new issues and ideas as they emerge and to contribute to the evolution of new theory.

However, this approach could be time-consuming, the analysis and interpretations are difficult, and may not have credibility with policy-makers (Saunders et al., 2012; Easterby-Smith et al., 2015). Despite its critics this philosophy was considered to be the most appropriate to the stated aim and objectives, and for answering the CRQ. This is because the purpose of this study is not uncovering positivistic truth or critical theorist local universal truths. Rather the CRQ was focused on individual perceptions of DCs in the public procurement strategic activities grounded in the language, dialogues and indeed cognitive processes of the sampled participants and the research outcomes constitute a snapshot in time rather than a universal law.

3.3 Research Approach: Inductive vs. Deductive

Interpretivism is the best-suited philosophical viewpoint for this thesis since it appears to offer the most likely means of achieving the research objectives. The researcher has considered importantly exploring systems of logic of social science research that invigorate understanding of how to bring forward the knowledge about the world in the public procurement context. There are arguably two distinct theories pertaining to the nature of the relationship between theory and research, namely deductive and inductive systems of logic (Trochim, 2006a; Bryman and Bell 2011; Saunders et al., 2012; Easterby-Smith et al., 2014).

The research methodology literature indicates that induction and deduction are two basic models that to a large extent explain the nature of scientific knowledge achieved (Collins and Hussey, 2008). Goel and Dolan (2004) highlight the importance of clarification of the research approach in terms of whether it is deductive or inductive since they differ from each other therefore they require different techniques of data collection and analysis. Marshall and Rossaman, (1989, p. 2014) suggest that when researchers first begin to open up new lines of inquiry there will be no useful theories available from which to deduce propositions for testing. “Knowledge has to begin by collecting facts and then...find some order to them.” This is known as induction. In contrast, deduction is the technique by which knowledge develops in more mature fields of enquiry. It involves a sort of logical leap. Going a stage further to the theory, data is then collected to test it.
Gray (2014) explained the fundamental differences between deductive proof known as deduction and inductive discovery known as induction. The deductive approach begins with a universal view of the situation and works back to particulars. In contrast induction moves from fragmentary details to create connected view of the situation. Further, in deduction the approach moves towards hypothesise tested, after which the principle is confirmed, refuted, or modified. In contrast, the inductive approach focuses on data collection, after which the data are analysed to establish patterns. In other words, the deductive approach seeks to test a theory though measures such hypothesis, while an inductive approach seeks to explore data to develop theories from them (Saunders et al., 2012).

However, Collins and Hussey (2008) and Saunders et al., (2012) state that the philosophical arguments are divided in three broad categories: deductive, inductive and abductive as shown in Table 21.

| Table 21: Three Research Approaches and Their Characteristics. Source: Adapted from (Collins Hussey, 2008; Saunders et al., 2012, p. 144) |
|-----------------|-----------------|-----------------|-----------------|
|                 | Deduction       | Induction       | Abduction       |
| Logic           | In a deductive inference, when the premises are true, the conclusion must also be true | In an inductive inference known premise are used to generate untested conclusion | In an abductive inference, known premises are used to generate testable conclusion |
| Generalisability| Generalising from the general to the specific | Generalising from specific to the general | Generalising from the interaction between specific and the general |
| Research Procedure | Research proceeds from theory, through hypothesis, to empirical analysis | Research proceeds from empirical research to theoretical results |  |
| Use of data     | Data collection is used to evaluate proposition or hypothesis related to an existing theory | Data collection is used to explore a phenomenon, identify themes and patterns and create a conceptual framework | Data collection is used to explore a phenomenon, identify themes and patterns, locate these in a conceptual framework and tests these through subsequent data collection and so forth |
| Theory generation and building | Theory generation and building | Theory generation and building | Theory generation and building |
The table indicates that the models differ from each-other. The inductive process is a way of building from the data, to broad themes, to a generalised model or theory (Collins and Hussey, 2008; Saunders et al., 2012; Creswell, 2015). These theories and generalisations are then compared with personal experiences or against the extant literature on the topic being studied. This will provide a richer approach to the research data that is gathered and should allow for the world to be seen through the eyes of those studied.

Similarly, Goel et al., (1997); Elo and Kyngas (2007); Bryman and Bell (2010) and Gray (2014) state that if the research starts with theory, often developed from a researcher’s reading of the existing literature and the research strategy is designed to test the theory then researchers implement a deductive approach. In other words it begins with a universal view of the situation and works back to particulars (Gray, 2014). However, the issues are not as clear-cut as are sometimes presented in the literature. Studies by Snape and Spencer (2003) and Bhattacherjee (2012) argue that an inductive approach involves using evidence as the genesis of a conclusion, in contrast, to the deductive processes, which uses evidence in support of a conclusion. Bryman and Bell (2010) express their concerns in regards to the inductive approach stating that the association of inductive approach with qualitative research is not straightforward: not only does much qualitative research not generate theory, but also theory is often used at the very least as a background to qualitative investigation.

In contrast, deductive theory represents the commonest view of the nature of the relationship between theory and research (Bryman and Bell, 2010). The researcher, working on the basis of what is known about a particular domain and of the theoretical considerations in relation to that domain, deduces a hypothesis that must then be subjected to empirical scrutiny. In contrast, inductive theory represents the opposite view to deduction as the researcher infers the implication of his/her findings for theory development. The deductive approach is associated with quantitative research, while an inductive approach is associated with qualitative research (ibid). They suggest the crude description of two approaches as being; first, ‘deduction: Theory - observations/findings’ ‘and second, with induction, the process is reversed - inductive: ‘observations/findings – Theory’ (Bryman and Bell, 2010, p. 12).

In other words, a deductive approach, predominant in quantitative research, uses the theory from the beginning of the study and aims to verify or test that theory, as opposed to developing it (Eisenhardt and Graebner, 2007). They advance theories, gather and test data using an
appropriate instrument or mechanism, and then discuss the results by way of confirming or rejecting a particular theory. This theory becomes central to all aspects of the research process i.e. organising the model, the foundation of the research hypotheses and the subsequent method for the data collection. Deduction can be seen as ‘moving from theory to the observations’.

This thesis contributes to theory development therefore the inductive approach is suitable (Bansal and Corley, 2012; Silverman, 2005; 2013). The inductive approach gives the opportunity to have more explanation of what is going on. It provides a greater insight into the complexity of a phenomenon and facilitates theoretical development (Sackmann, 1992; Eisenhardt and Graebner, 2007; Saunders et al., 2012; Easterby-Smith et al., 2014) and also facilitates the categorisation (Elo and Kyngas, 2008) of DCs. Given the research objectives and the nature of the study, this research will adopt an interpretivist approach with inductive reasoning, in order to provide more substance to the data gathered during interviews and should result in a broad set of themes. Whilst this approach is deemed as the most appropriate for this type of study, it could be argued that whereas qualitative research is primarily based upon (and begins with) inductive reasoning, elements of deductive thinking may also play a part as the analysis progresses. This will be due to the necessity to constantly re-evaluate the gathered data and determine the need to gather more evidence in support of the developed themes. In contrast to deduction, induction can be succinctly summarised as ‘moving from observations to theory’. This inductive logic is depicted in Figure 15.

Section 2.4.1 demonstrates the composition of a conceptual framework making explicit areas of investigation, intending to contribute to the theoretical development of the DCs concept. There is some duality of purpose in this research, first, to offer an academic contribution by extending DCs in public sector drawing upon Teece’s (2007) conceptual framework that defines three clusters of DCs: sensing, seizing, and transforming. Second, to provide a typology of dynamic capabilities in strategic procurement offering DCs as an emerging paradigm of modern public sector procurement. This is very important since DCs have been poorly specified, and hence the researcher may not know what to look for (Ambrosini and Bowman, 2009). Rather than hypothesising about dynamic capabilities and their existence in strategic procurement activities, an inductive approach was chosen so that unknown groupings could emerge (Sackmann, 1992). This enables the generalisation of empirically based knowledge, which provides insight into the complexity of DCs through identification of sensing, seizing,
and transforming capabilities in each of the local authorities through drawing patterns and coming up with the typology of DCs in public sector procurement.

<table>
<thead>
<tr>
<th>Researcher gathers information</th>
<th>Document/archival research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Researcher asks open-ended questions</td>
<td>Qualitative data</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Researcher analysis the qualitative data to form themes or categories</td>
<td>Context Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Researcher looks for broad patterns, generalisations, or theories from themes or categories</td>
<td>Case study investigation</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Researcher poses generalisations or theory from past experiences or literature</td>
<td></td>
</tr>
</tbody>
</table>

Figure 16: The Inductive Logic of Research in a Qualitative Study. Source: The Author Adapted from Creswell (2015, p. 66)

3.4 Methodological Choice: Qualitative vs. Quantitative

Bryman (1988) suggests that the decision to implement a specific methodology should be based on its suitability to answer the research question. The researcher considers the methodological fit to be a key aspect of good quality research (Hurmerinta-Peltomaki and Nummela, 2006). Therefore, to begin the research design process it was logical to contemplate the end-point of the study by considering the outcome of the research. The notion of data analysis gravitates around the two clusters of quantitative and qualitative research (Silverman, 2005; 2013; Saunders et al., 2012; Gray, 2014; Easterby-Smith et al., 2015) and it is important to understand the characteristics of each shown in table 3.5. However, Günter and Huber (2005) asserted that making a distinction between qualitative and quantitative is neither a simple affair nor even makes sense in every case. This does not mean that there is not a difference between the two, but the terminology used within both is ambiguous and thereby sometimes leads to confusion and crossover of meaning and interpretation (Collins and Hussey, 2013).
Qualitative research is associated with an interpretive philosophy (Denzin and Lincoln, 2009). It is interpretive because the researcher needs to make sense of the subjective and socially constructed opinions expressed about the phenomena being studied (Saunders et al., 2012). Qualitative research emphasises the process of discovery by exploring how social meaning is constructed and stresses the relationship between the investigator and the research topic (Denzin and Lincoln, 1994). However, Saunders et al., (2012) argue that qualitative research can also been used within pragmatism and realism. Furthermore, qualitative research tends to be concerned with words rather than numbers (Bryman and Bell, 2011; Saunders et al., 2012; Easterby-Smith et al., 2015). Berg (2004) argues that qualitative research refers to the meanings, concepts, definitions, characteristics, metaphors, symbols, and description of things contrasting with quantitative research, which refers to the measure and counting of things. On the same lines, Snap and Spencer (2003) outlined a number of key elements which distinguish the qualitative approach among these; it is an approach, which provides a deeper understanding of the social world; it is based on small scale samples; it uses interactive data collection methods, i.e. interview, focused group, and observation. Furthermore, Easterby-Smith et al., (2015) suggest that qualitative research tends to be of a more exploratory nature and involves open-ended rather than pre-coded questions and responses, which makes it essential to record the whole interaction between the researcher and research participants.

Conversely, historically the quantitative approach has been the dominant strategy, although its influence has waned since the mid-1980s when qualitative research became more influential (Bryman and Bell, 2011). At its most basic quantitative research can be defined as being concerned with numbers and statistics; it is firmly grounded in an empirical base and typically associated with the positivist paradigm (Henn et al., 2006; Burns and Burns 2008; Bryman and Bell, 2011; Easterby-Smith et al., 2015). However, this is an approach that it might be used within the realist and pragmatist philosophies (Saunders et al., (2012). It is usually associated with the deductive approach (Bryman and Bell, 2011; Bryman, 2012; Saunders et al., 2012; Easterby-Smith, 2015). Although, Saunders et al., (2012, p. 162) argue that it might also incorporate an inductive approach ‘where data are used to develop the theory.’ It is characterised by a formal, systematic process in which numerical data are used to measure and analysis casual relationships between variables (Carpenter et al., 2001). Quantitative research has it strength in establishing its logical and linear structure that can test and thereby prove or disprove the hypotheses (Albadi et al., 2011). Among other writers Bryman and Bell (2010) have explored the common contrast between quantitative and qualitative research. Another
study by Mack et al., (2008) focused in the public sector, suggests a key difference between quantitative and qualitative methods is their flexibility. Generally, quantitative methods are fairly inflexible. With quantitative methods such as surveys and questionnaires, for example, researchers ask all the respondents identical questions in the same order. The response categories from which respondents may choose are “closed-ended” or fixed. The advantage of this inflexibility is that it allows for meaningful comparison of responses across respondents and study sites. However, it requires a thorough understanding of the important questions to ask, the best way to ask them, and the range of possible responses.

Creswell (2015) depicts the link between the qualitative and quantitative research approach as the mixed method approach as it engages data acquired from both approaches. The qualitative research approach relies on the use of images and words for its data analysis while the quantitative research relies on the use of numbers (Denscombe, 2014). However, O’Leary (2006) attests to Denscombe’s definition and adds qualitative data is often analysed through the use of thematic study while for quantitative data the analysis is done through statistical study, and as such, researchers often rely on the use of both approaches to get results that are not only meaningful but can be true and free of errors.

Robson, (2002; 2011) also provides significant examination of the differences between quantitative and qualitative research, talking in terms of fixed and flexible design, he captures many of the procedural differences between traditional quantitative and qualitative research. It is, however, essentially a theoretical approach and methodologists have sought more theoretically based alternatives (Ragin, 1987), distinguished between variable-orientated and case-orientated approaches; Sayer (2000), between extensive and intensive research designs. Mohr (1996) suggests that the two types of causation, successionist and generative, could be used to make a distinction. The successionist view is traditionally predominant in quantitative research, where the focus is on establishing systematic relationships between inputs and outputs and it is based on what Mohr called variance theory. It deals with the contribution of differences in measured values of particular variables to differences in values of other variables.

Qualitative methods ask mostly “open-ended” questions that are not necessarily worded in exactly the same way with each participant. With open-ended questions, respondents are free to respond in their own words, and these responses will be more complex than simply “yes” or
“no”. Mackenzie, and Knipe (2006) state it is important to note that there is a range of flexibility among methods used in both quantitative and qualitative research and that flexibility is not an indication of how scientifically rigorous a method is. Rather, the degree of flexibility reflects the kind of understanding of the problem that is being pursued using the method chosen. However, Table 22 summarises some of the characteristics discussed above classified by Mac et al., (2001).

### Table 22: Characteristics of Qualitative and Quantitative Research. Source: Mac, Rolfe and Sira (2001, p. 3)

<table>
<thead>
<tr>
<th></th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Framework</strong></td>
<td>- Seeks to confirm hypotheses about phenomenon.</td>
<td>- Seeks to explore phenomena.</td>
</tr>
<tr>
<td></td>
<td>- Instrument used more rigid style of eliciting and categorising responses to questions.</td>
<td>- Instruments use more flexible iterative style of eliciting and categorising responses to questions.</td>
</tr>
<tr>
<td></td>
<td>- Uses highly structured methods such as questionnaires, survey and structure observation.</td>
<td>- Uses semi-structured methods such as interviews, focus group and participant observation.</td>
</tr>
<tr>
<td><strong>Analytical objective</strong></td>
<td>- To quantify variation.</td>
<td>- To describe variation.</td>
</tr>
<tr>
<td></td>
<td>- To predict casual relationships.</td>
<td>- To describe and explain relationships.</td>
</tr>
<tr>
<td></td>
<td>- To describe characteristics of a population.</td>
<td>- To describe individual experience.</td>
</tr>
<tr>
<td><strong>Question format</strong></td>
<td>- Close- ended</td>
<td>- Open ended</td>
</tr>
<tr>
<td><strong>Data format</strong></td>
<td>- Numerical</td>
<td>- Textual</td>
</tr>
<tr>
<td><strong>Flexibility in study design</strong></td>
<td>- Study design is stable from beginning to the end.</td>
<td>- Some aspects of the study are flexible (i.e. the addition, execution or working of particular interviews questions).</td>
</tr>
<tr>
<td></td>
<td>- Participant responses do not influence or determine how and which questions researcher ask next.</td>
<td>- Participant responses affect how and which questions researchers asks next.</td>
</tr>
<tr>
<td></td>
<td>- Study design is subject to statistical assumptions and conditions</td>
<td>- Study design is iterative, that is, data collection and research questions are adjusted according to what is learned.</td>
</tr>
</tbody>
</table>

### 3.4.1 Research Method Adopted – Qualitative

The research method employed is fundamentally based on a flexible qualitative research paradigm. The DCs literature (Chapter 2) highlights a number of issues in investigating DCs in the private and public sectors. Eriksson (2013) examined methodological choices in empirical studies in the DCs field and analyses how well they accommodate the complexity of the concept. Her findings suggest that, DC research comprises a balanced mix of qualitative and quantitative studies, identifying three main issues in term of research methods. First, the
use of past performance data against current status of DC must be addressed. Second, as DC deals with change, caution needs to be exercised in the use of cross-sectional data. Third, the essence of DC should not be lost in the operationalisation, and the research settings needs to be meaningful from the DC perspective. Edmondson and McManus (2007) suggest that four key elements of methodological fit: research question(s), the literature review, data collection and analysis, and contribution to the literature need to be aligned. These elements have been considering as an important aspect of this thesis.

Easterby-Smith et al. (2009) suggest that the strength of qualitative approach on studying DC is evident since it enables a detailed description of what processes are involved, the role of management, the configuration of DCs, and the interaction with the environment. This research will follow a qualitative methodology; there are circumstances where a quantitative approach would also be valuable. If the research were to discuss the ‘measurable outcomes’ of the value delivered rather than assessing the ‘social realities’ then it may follow a quantitative pathway rather than qualitative. This would be consistent with the assessment of procurement’s ability to impact on a firm’s performance (Chen et al., 2004; Gonzalez-Benito, 2007). A quantitative approach to this research subject could not provide the researcher with the necessary data to meet the research objectives. Instead, the researcher decided to use a qualitative approach to accomplish the overall aim of the study. This approach helps to achieve a deeper understanding of the three clusters of the DCs: sensing, seizing, and transforming capabilities in public procurement and answers the research questions. Gray (2014) suggests that qualitative research is distinguished as a highly contextual approach where data are gathered over relatively long periods and in natural real-life settings enabling the researcher to answer ‘what’ ‘how’ and ‘why’ questions rather than giving a brief view about the phenomenon studied.

In summary, this thesis follows an interpretivist philosophy, inductive approach, and qualitative method. This was not a defined intention at the outset of the program, but in line with Reiter et al., (2011) has developed in this way in response to the questions and the development of the research activities. Through qualitative research we can explore a wide array of dimensions of the social world, including the texture and weave of everyday life, the understandings, experiences and imaginings of research participants, the ways that social processes, institutions, discourses or relationships work, and the significance of the meanings they generate. Lynch (2014) claims that we can do all of this qualitatively by using methodologies that celebrate richness, depth, nuance, context, multi-dimensionality and
complexity rather than being embarrassed or inconvenienced by them. Instead of editing these elements out in search of the general picture or the average, qualitative research factors then directly into its analyses and explanations. This means that it has an unrivalled capacity to constitute compelling arguments about “how things work in particular contexts” (Mason, 2002, p. 1). It is important to recognise that the research methodology and design will have a level of fluidity dependent on the outcomes of the research at each of the three proposed stages; this is discussed in further detail in the following section. This perspective is supported by Bansal and Corley (2012) who recognise that qualitative research is an ‘interactive process’ to be developed through the research program. The qualitative research design intends to work with relatively small number of cases (Silverman, 2005).

3.5 Research Design

Parahoo (2014) claims that research design explains how, when, and where the data will be collected and analysed. Controversially, Polit et al., (2001) refer to the research design as the researcher’s general idea about how the research question(s) will be answered or the methods for testing the hypotheses. The research design can be categorised in different types: Exploratory Research, Explanatory Research, Descriptive Research (Saunders et al., 2012).

3.5.1 Exploratory Research

This type of research design is mostly suitable when information available about the research subject is very limited (Wilson, 2010; Bryman and Bell, 2011). Hence the researcher explores different ideas that are relevant to the subject matter under investigation in order to identify the factors and elements associated with it, and to begin with, data is collected through secondary sources. Primary data is collected via qualitative research methods at large (Saunders et al., 2012).

Exploration is mostly relevant when the researcher is not aware of the problem, or the reason behind the problem, and thus explores the issue through various sources. Exploratory research has three main objectives; to obtain a deeper understanding of the subject under examination, to determine the possibility of conducting in-depth further analysis, and to develop the techniques to be utilized in further successive studies (Bryman and Bell, 2011; Saunders et al., 2012).
3.5.2 Explanatory Research

This research design is about explaining the problem, or issue at hand. In the view of Dane (2010) explanatory research is conducted to explain the issue of why. It not only explains the problems but also the variables and relationship(s) of the variables involved in the mechanism. According to White and Roth (2009) the explanatory research design attempts to build theories and forecast natural and social phenomena. He further states that the ultimate goal of this research design is to gain control over natural and social events.

Some general objectives of the explanatory research method include answering the research question of ‘why’, identifying two or more variables and understanding the relationship between these variables, interpreting the causes and effects between these variables and identifying the difference between the responses of two different groups of respondents (Taylor and Wright, 2004; Beadles and Lowery, 2005; Bryman and Bell, 2011; Bryman, 2012; Saunders et al., 2012).

3.5.3 Descriptive research

Several scholars assert that descriptive research structures describe a situation just as it has happened (Portney and Watkins, 2000; Bordens and Abbott, 2002; and Best and Kahn, 2016). This type of research design does not result in the development of new theories but rather it describes the already existing data in a systematic way. Although some authors (de Vaus 2001; Sandelowski, 2010) call descriptive research ‘a mere description’ it sometimes delivers significant information, facts and figures that provide a better basis for explanatory research. For example, a population census not only provides information about the number of people but also about various social indicators like demographics, unemployment, and literacy. According to Rubin and Babbie (2016) descriptive research aims at describing different attributes of a sample and the relationship(s) between different situations and events. In the opinion of Hut (1992) and Cooper et al., (2006) there is no involvement of hypothesis in descriptive research but in exceptional situations some hypotheses are developed, but these are meant only for describing the correlations between variables. In addition Thomlison and Schwabenland (2010) articulate that a descriptive research design does not study the impact of a theory nor does it give details of a relationship between variables, however, it is significantly used in state survey levels and yields valuable information.
3.5.4 Research Design Adopted – Exploratory Design

To answer the CRQ exploratory methods have been selected since little is known about the subject of the research (Bryman and Bell, 2011). The researcher will investigate DCs in public procurement strategic activities to enhance understanding of their use in strategic conversion using Teece’s (2007) framework to identify the microfoundations of public sector procurement. The exploratory design is associated with the approach to primary and secondary data employed in this study beginning the investigation by scrutinising the existing literature. In other words, starting with data collection through secondary data sources and then continuing gathering primary data using qualitative methods including; semi-structured interviews and observation. Bryman and Bell (2011); Saunders et al., (2012); Gray (2014) suggest that this approach enables the researcher to invigorate understanding of the subject under examination, to determine the possibility of conducting in-depth further analysis, and to develop the techniques to be utilised in further successive studies.

3.6 Time Horizon of Research

The time horizon allocated to a research project essentially means the approximate time, which the researcher takes in order to collect the data, required for the research. Typically, this is categorized into two types, namely; cross sectional research and longitudinal research (Saunders et al., 2012; Bryman and Bell, 2011).

3.6.1 Cross sectional research

Cross-sectional research is also known as the ‘snapshot’ approach. This is where research is conducted for a given phenomenon at a particular point in time taking into consideration differing perspectives of diverse variables and individuals (Bryman and Bell, 2011; Saunders et al., 2012; Bryman, 2012). This type of research is particularly feasible when the given project is constrained by time. Therefore, a very important feature in this type of research is having the ability to compare different variables at a single point in time. However, the latter is also the main disadvantage of this kind of research – simply because changes that have happened earlier and after the research was conducted would not be taken into consideration. Taking into consideration the time limitations imposed in most research activities most researchers utilise this type of research in order to carry out their study.
3.6.2 Longitudinal research

When conducting a longitudinal study, the researcher conducts research over a longer period of time unlike that of a cross-sectional research. The time taken to carry out such research varies on the researcher’s requirements, and in certain circumstances, may even span into several years (Saunders et al., 2012).

The key advantage of conducting a study of this nature is, since the study is conducted over an extended period of time and thus beyond a single point in time, the researcher has the ability to identify changes in the variables that are being observed therefore enabling the researcher to explain in detail the cause and effect relationships between variables. Strategies such as an experiment, action research, and grounded theory are typically used in this type of strategy.

3.6.3 Approach adopted for the research

In this study the cross-sectional approach has been adopted because of both the time constraints involved in an academic study as well as the time constraints imposed by the organisations at hand in order to minimise disruptions to operations. Consequently, the timing of the data collection process was anticipated to be about three months. Of course, additional time was allocated accordingly, as problems were experienced during the process of collecting the data. In addition, because this research is based on six Welsh Local Authorities the research strategy employed is that of the use of multiple case studies.

3.7 Research Strategy

The research strategy is a plan of action to achieve the research goals (Crotty, 1998; Saunders et al., 2012). This plan will indicate the researcher’s approach to answering the CRQ. Denzin and Lincoln (2011) and Gray (2014) describe it as a methodological link between research philosophies, theoretical perspective, and subsequent choices of methods of data collection and analysis. Qualitative research is not built upon a unified theory or methodological approach (Flick, 2015) and can adapt various research strategies. However, for the purpose of this study, a case study strategy has been employed.

3.7.1 Case study

For the investigation of DCs in public procurement context, a qualitative case study approach is applied drawing in multiple Welsh Local Authorities (WLA). Eisenhardt (1989); Rowley
(2002) assert that a case study strategy focuses on understanding the dynamics present within a single setting. Another reason why the strategy have been applied is that it is associated with qualitative research (Gary, 2014; Easterby-Smith, 2015). An early study by Eisenhardt (1989) asserts that case studies are well suited to new research areas or research areas for which existing theory seems inadequate. This type of work is highly complementary to incremental theory building from normal science research. The former is useful in the early stages of research on a topic or when a fresh perspective is needed, whilst the latter is useful in later stages of knowledge. It also has a considerable ability to generate answers to the research questions “why?”, “what?”, and “how?” (Saunders et al., 2012). For this reason the case study strategy is used in exploratory research (Yin, 2013). It is suitable for investigating a contemporary phenomenon in-depth and within its real-context (Yin, 2009; 2014). This strategy allows for generalisation of multiple perspectives though potentially multiple data collection methods (Lewis and Ritchie, 2003; Yin, 2013). The integration and contrasting of different perspectives could lead to a rich and detailed understanding of a context (Gray, 2014).

An early study by Saunders et al., (2012) asserts that a case study strategy may be a very worthwhile way to explore and challenge existing theory as well as providing a source of new research questions. A case study is defined as: “a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real-life context using multiple sources of evidence” (Robson, 2002, p. 178).

However, Punch (2005) asserts that it is a strategy that has proven challenging to define since almost anything can serve as a case study. However, it enables researchers to provide detailed discovery, using flexible methods, “…whatever methods seem appropriate.” This was also emphased in an early study by Stack (2000, p. 436) arguing that a case study strategy is not always straightforward since it could be very complex to be able to get to the bottom of the problem as it would be appropriate to concentrate only “…on one.” This allows for a greater understanding of the context of the research and the processes being enacted (Morris and Wood, 1991).

The recent study by Gary (2014, p. 163) claims that case study design is generally flexible, but at the design stage a number of the following questions arise;

1. *What is the ‘unit of analyses’ for the case?*
2. *What criteria are to be used in selecting cases for study?*
3. Who are the key participants?

4. How many cases are there and how many participants should be within each case?

A multiple case studies strategy has been used following the three main design stages shown in Table 23. The rationale for choosing this strategy is that it facilitates replication across cases. These cases were identified as having very strong or weak or/and absent of DCs, on the basis of the effectiveness to answer the CRQ predicting similar results among those that are regarded as innovative following the lines of suggestions by Silverman (2005) and Saunders et al., (2012). This approach is distinguished by its ability to explore a wide array of dimensions of the social world by using methodologies that celebrate richness and in-depth understanding (Mason, 2002)

However, whilst taking a more in-depth view the research outcomes could be limited by the small sample size (six out of 22 WLAs shown in Table 23) and number of participants (11 participants). To some extent this could be countered by the judicious selection of local authorities but inherently that would prevent comparisons within a sector, and may result in questions of research bias through detailed pre-selection. This could be avoided by setting a minimum standard that surveyed organisations’ must satisfy in order to progress to the case study approach. Table 23 defines these standards and criteria of selection approach highlighting their procurement approach (strategic vs traditional) and also the access to primary data. Such consideration in itself throws out a further challenge, if the focus of the case studies is only on those organisations who satisfy pre-defined criteria, the research is at risk of failing to consider those WLAs that deliver good functional and performance without the use of the defined procurement tools, and consideration of how they can achieve such results. However, a recent study by Gray (2014) suggests that qualitative research often works with small sample cases or phenomena.

Another justification for using the strategy is that theoretical development is one of the contributions of the study. The process of building theory from the case study research is appropriate when the topic is relatively new, or when there is a need to inject some fresh perspectives into the theme that is well known (Eisenhardt, 1989; Eisenhardt and Graebner, 2007). While, Gary (2014) building upon Yin’s (2013) work has come up with the multiple case study method that has been useful for the study.
Furthermore, as stated above in order to answer the three questions which emerged from the literature review the researcher needed to use qualitative research because to the researcher’s knowledge there are no previous studies in Wales that allow the researcher to formulate a quantitative hypothesis. Furthermore, because of the limited number of senior procurement experts from selected LAs and NPS involved at a strategic level participating in this research a quantitative approach is the only way to conduct the research and the case study method is the most optimum strategy. This is because the researcher can triangulate data collection techniques to get answer to the research questions.

### Table 23: Case Studies Selected and Criteria of Selection

<table>
<thead>
<tr>
<th>Welsh Local Authorities</th>
<th>Criteria for selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Cardiff Council</td>
<td>Regarded as Innovative: The winner of the GO Innovation or Initiative of the Year Award 2016</td>
</tr>
<tr>
<td>Carmarthenshire County Council</td>
<td>Regarded as Innovative: The winner of the GO Collaboration Award 2016</td>
</tr>
<tr>
<td>Monmouthshire County Council</td>
<td>Regarded as Innovative: Procurement Innovation NESTA</td>
</tr>
<tr>
<td>Caerphilly County Council</td>
<td>Application of ICT, organisation structure and staff training, was recognised by the Welsh National Procurement 2015 for its outstanding contribution.</td>
</tr>
<tr>
<td>Newport County Council</td>
<td>No recognition</td>
</tr>
<tr>
<td>Powys County Council</td>
<td>No recognition</td>
</tr>
</tbody>
</table>

Furthermore, as stated above in order to answer the three questions which emerged from the literature review the researcher needed to use qualitative research because to the researcher’s knowledge there are no previous studies in Wales that allow the researcher to formulate a quantitative hypothesis. Furthermore, because of the limited number of senior procurement experts from selected LAs and NPS involved at a strategic level participating in this research a quantitative approach is the only way to conduct the research and the case study method is the most optimum strategy. This is because the researcher can triangulate data collection techniques to get answer to the research questions.

### 3.8 Sampling criteria

Sampling is a “segment of the population that is selected for investigation” (Ghauri and Grønhaug, 2005, p.147). Saunders et al., (2007) suggests that in order to provide a broad perspective about a certain situation are required to draw a sample as we may not be able to reach the entire “population” and furthermore Gill and Johnson (2010) say researchers are usually concerned with getting a sample from a group, which is often referred to as “population” that will conveniently provide all answers required for the entire group, the main emphasis being to ensure that the entire population is represented.
Sampling has been also considered as a process in which a pre-determined number of observations are selected from a larger population. Sampling is of critical importance in research, as in most cases there is a larger population and due to numerous restrictions sampling is the only viable option for obtaining reliable responses that represent the views of the wider population. Sampling methods include two main categories (probability and non-probability-based samples) and in each category there are a number of techniques in order to select the most suitable sample in the context of the given research (Bryman and Bell, 2011; Saunders et al., 2012; Bryman, 2012). This research dismisses probability based sampling since a case study strategy has been employed.

3.8.1 Purposive Sampling: Non-probability-based sampling

Denzin and Lincoln (2000, p. 370) assert that purposive sampling is suitable approach for qualitative research unlike random sampling since “They seek out groups, settings, and individuals...where the process been studied is mostly likely to occur.” The researcher uses their own judgment to select cases that will best enable the researcher to answer the CRQ and to meet the research objectives. Purposive sampling allows the researcher to choose a case because it illustrates some features or process in which the researcher is interested (Silverman, 2005). The researcher has a clear idea of what sample units are needed according to the purposes of the study (Easterby-Smith et al., 2014). This is a suitable approach for the study since the sample has been selected based on robust criteria (see Table 25; Section 3.7.1). The LAs have been selected based on the recognition of the procurement innovative approach adapted.

This qualitative study uses ‘purposive sampling’ (Saunders et al., 2009, p. 237), because it seeks to obtain insights (Gray, 2014) into DCs within a public procurement context and identify ‘information-rich cases’ which can be studied in-depth (Patton, 2002). This is also to best enable the researcher to answer the research question(s) and to meet objectives (Saunders et al., 2012). One drawback with purposive sampling is that it is ‘not statistically representative of the total population’ (ibid). In addition, purposive sampling introduces subjectivity into the sampling process, because such sampling relies upon the researcher to ‘select cases’ (ibid). These two issues in turn raise questions over the reliability of the study’s findings, unless these
are triangulated. Triangulation can be achieved by using additional, methods within the same study or by means of a follow-up study where different methods are deployed (Denzin, 2009).

Consequently, in order to ensure the greatest possible ‘thickness of description’ (Miles and Huberman, 1994), the researcher chose to gather data from ‘elite’ participants who were recognised as ‘experts in the community’ (Kvale, 2009). The researcher identified participants based on their strategic role in the procurement strategic formation and implementation since DCs are higher – level capabilities developed and deployed by leaders or experts in strategic positions. The sample represents an appropriate category of participants including ‘procurement leaders’, ‘strategic managers’ and ‘experts’ as suggested by Teece (2007); Helfat et al., (2007) and Kvale (2009) that could provide the whole view from the environmental scanning process to the transformation. The literature observation indicates that empirical research to date predominantly explored these clusters ‘sensing’ mode of DCs, with a scarcity of studies exploring the modes of ‘seizing’ and ‘transforming’ (Teece, 2007).

<table>
<thead>
<tr>
<th>Welsh Local Authorities &amp; NPS</th>
<th>Number of Participants</th>
<th>Procurement Position</th>
<th>Code of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC1</td>
<td>1</td>
<td>Head of Commissioning and Procurement</td>
<td>HCP</td>
</tr>
<tr>
<td>CCC2</td>
<td>4</td>
<td>The Audit and Risk Manager</td>
<td>ARM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strategic Procurement Manager</td>
<td>SPM1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Category Manager Officer</td>
<td>CMO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strategic Procurement Manager</td>
<td>SPM2</td>
</tr>
<tr>
<td>MCC</td>
<td>1</td>
<td>Strategic Procurement Manager</td>
<td>SPM3</td>
</tr>
<tr>
<td>CCC3</td>
<td>1</td>
<td>Head of Procurement</td>
<td>HP</td>
</tr>
<tr>
<td>NCC</td>
<td>1</td>
<td>Strategic Procurement Manager</td>
<td>SPM4</td>
</tr>
<tr>
<td>PCC</td>
<td>1</td>
<td>Lead Procurement Service</td>
<td>LPS</td>
</tr>
<tr>
<td>NPS - Overarching Body</td>
<td>2</td>
<td>Director of National Procurement Service</td>
<td>DNPS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Head of Category Management</td>
<td>HCM</td>
</tr>
</tbody>
</table>

Table 24: Overview of the Sampling Size and Codification

Table 24 indicates the size of the sampling, participant’s positions evidencing that all participant are in a position to provide rich data. Participants have been selected on bases of
three main criteria, namely (1) the level of experience in the field of public procurement, (2) accessibility and willingness to participate, (3) role or involvement in the development of the strategic procurement approach. The table also represent six WLAs and participants codes. The approach to codification was simplified by using first initials of selected local authorities. However, as the table indicates, three WLAs share common initial CCC. To distinguish between them a number has been added determined by the size of the LA. Same approach has been applied for participants taking the first initials of their current role description.

3.9 Primary Data Collection Methods

Walsh and Wigens (2003) argue that this section of the methodology should outline how the Researcher ‘went about the research study’ positing that the goal here is to describe the data ‘sources’, the data collection tools that were used and the procedures that were undertaken to collect data. Bobbie (2013) points out that science is an enterprise dedicated to finding out – no matter what you want to find out, though, there will likely be a great many ways of doing it, which highlights the broad range of both quantitative and qualitative data collection methods that exist. With these factors in mind, the remainder of this chapter is focused on providing a detailed account, including the rationale, of the data collection and analysis methods chosen, rather than engaging in a broad-based critique of all available methods.

The process of selecting appropriate methods was a vital aspect of research design; it is a comprehensive plan for conducting an investigation that stretches from the CRQ through the methods of data analysis, interpretation and reporting, and required thorough consideration of the underlying ontological and epistemological position (Voght, Gardner and Haeffelle 2012). If managed correctly this process can enhance the study; however, if not, the validity and credibility of the study may be compromised. Bechhofer and Paterson (2001, p. 2) claimed:
“... it is relatively easy to generate a research problem, working out how to actually do the research... settling on an adequate research design is much less straightforward”.

A good research design is one that gives the researcher confidence in the solidarity of the conclusions drawn from the data, and at a level of solid practicality, good research design allows the researcher to achieve more and better things for the same effort (Rugg and Petre 2006). In keeping with the adopted interpretivist paradigm, this study embraced a primarily qualitative focus in order to meet the stated aim, objectives and CRQ.
Bechhofer and Paterson (2001, p. 2) also state that “…what all researchers ought to aim for is the kind of research design which, once articulated, seems so attractive and obvious as to lead others to say I wish I had thought of that” highlighting the significant challenge faced by researchers. Accordingly, the envisaged research design adopted a qualitative methods approach. This was considered appropriate to the underlying philosophy and CRQ, and may arguably be considered somewhat innovative in terms of its likely attractiveness to other researchers. Consequently, the author posits that the contribution to knowledge forwarded lie not only in the collected data and theoretical outcomes, but also within the research design itself; a claim that will be demonstrated in later chapters.

Figure 17: Primary and Secondary Data Collection Process. Source: Author

Figure 17 presents an overview of the primary and secondary data collection process and steps taken in primary research. Overall, two main categories of data have been distinguished. Considering inductive approach of the research the process started by exploring and collecting a wide range of secondary data from different sources and by using multiple sources of existing evidence in an attempt to identify relevant sources that discuss strategic procurement and its high order capabilities. The secondary data involve a wide range of EU, UK, WG and
independent published reports, national and local procurement strategies, WG procurement policy, and also professional body CIPS’s reports and research papers. The primary data were collected using semi-structured interview techniques, interviewing senior procurement experts involve in strategic level of six WLAs and NPS overarching body.

3.9.1 Interview Technique

Interviews are directed conversations evolving around questions and answers about a certain topic. Charmaz (2014) asserts that interviews differ from everyday conversation in that they are based on series of questions that follow a particular purpose, usually for getting an in-depth exploration of a particular topic or the story behind a participant’s experiences (Sanders et al., 2012; Gray, 2014; Easterby-Smith, 2015). The interview method is probably the most widely used method in qualitative research (Bryman, 2001; Silverman, 2005; Bryman and Bell, 2012; Gray, 2015). An interview has been described as a conversation between two people (Descombe, 2008), and as a type of data collection method where the researcher uses the participant’s answers as a source of data. Collis and Hussey (2009) are of the view that often researchers use interviews to gain an understanding of the subject and they will always base their findings on the opinions of their participants as they display their honesty, feelings and attitudes towards the particular research, as the interview enables them to elaborate more and give a greater understanding. Telephone interviews are considered to be increasingly common in research as they are preferred because of the speed of response and they are also said to be less costly (Rubin and Rubin, 2005). Often at times this kinds of data collection may require the use of structured questions for all the respondents taking part in the research (Saunders et al., 2008). However, Creswell (2007) says that even though researchers do not see their respondents by naked eye telephone interviews offer the best source of information. Interviews can be further classified in four categories, open ended, focus group, structured and semi-structured interviews (Bell, 2008). However, for the purpose of the thesis the telephone interview is not applicable since the researcher aimed to conduct face-to-face semi structured interview with at least six senior procurement personal and allowed the development of interaction and a relaxed atmosphere overcoming the isolation of a telephone call.

An early study by Potter and Hepburn (2005) asserts interviews are commonly put forward as the method of choice for research favouring qualitative approaches in the disciplines of both psychology and sociology. Nonetheless, the interview should not be seen as an easy option as
a data-collection method, particularly for the inexperienced researcher. Despite this, interviews have the potential to provide rich and highly illuminating data. Fontana and Prokos (2007, p. 9) argue, “Interviewing is one of the most common and powerful ways in which we try to understand our fellow humans”. Indeed, it may be argued that interviews are perhaps the most commonly used qualitative social science research tool, and often entail 2 relative strangers sitting down and talking about a specific topic (Rapley, 2002). Interviews can take the form of mailed or self-administered questionnaires, telephone surveys or face-to-face verbal interchange (Bryman 2012; Fontana and Prokos, 2007). At its most basic the face-to-face interchange, referred to herein as an interview, offers the researcher the ability to interact directly with participants in order to probe and clarify individual responses. This factor, coupled with a rigorous non-probability purposive sampling method alleviated any concerns regarding the participants’ credentials in terms of their relevant professional experience and qualifications, ensuring that appropriate practitioners were engaged within this study (Andrews et al., 2002). The author posits that face-to-face interviews offered a means to comprehensively achieve the stated aim and objectives, meet the data type and capture requirements of the CRQ and to align the research design with the underpinning ontological and epistemological philosophy of the embraced interpretivist paradigm.

The literature indicates that a case study strategy combines a wide range of techniques of data collection from various sources including archive, interviews, surveys and participant observation (Silverman, 2005; Saunders et al., 2012; Bryman and Bell, 2011; Gray, 2014; Easterby-Smith et al., 2015). However, due to the lack of access the researcher uses two of the techniques suggested: a semi structured interview to capture primary data and secondary data (archive). As previously stated, the intention was to interview procurement experts that are in the strategic position involved in the process of development and deployment of procurement capabilities. The researcher knew there were going to be a relatively small number of participants. However this was not simply an arbitrary number. Broad consideration was given to the question, which inevitably plagues academic supervisors throughout the world: “how many qualitative interviews is enough”? It appears that no reasonable answer exists; no magic number you can ‘do’ and then you are out of danger. Extended discussion on the subject from fourteen eminent social scientists, who are keen proponents of qualitative research, articulated through a recent National Centre for Research Methods (NCRM) review paper, overwhelmingly offers a response of “well...it depends”. Reaction to this thorny question
posed in the same paper was summed up perfectly by Wolcott, (2002 cited in Back & Edwards, 2012, p. 3)

“That is, of course, a perennial question if not a great one. The answer, as with all things qualitative, is “it depends.” It depends on your resources, how important the question is to the research, and even to how many respondents are enough to satisfy committee members for a dissertation. For many qualitative studies one respondent is all you need – your person of interest. But in general the old rule seems to hold that you keep asking as long as you are getting different answers.”

In contrast to quantitative methods researchers who should have a good idea of how many cases will be required to test their hypotheses from the outset, the exploratory nature of qualitative research may preclude knowing how much data to gather in advance, particularly because through the inductive approach, data is collected and the theory develops as a result of the subsequent data analysis.

Nevertheless, in contrast to this commonly held view, there are a number of experts in the field of qualitative research who offer support to the premise that in some cases much less interviewing may prove adequate. In some cases, depending on the purpose of the research, a single interview may be valid and can provide rich accounts of subjectivity (Baker and Edwards, 2012). If the purpose of the study is to establish if ‘something is possible’; the study is unique and not comparable to other cases; or in order to demonstrate that a particular phenomenon is more complex or varied than previously thought, then it may only take a few interviews.

Baker & Edwards (2012) also allege that inexperienced researchers often feel compelled to conduct more interviews because they perceive this as better, when actually, quality should be sought and preferred over quantity: the study may find that the evidence gathered is so repetitive that it can be argued that there is little benefit in continuing to gather more. To that end, and in accordance with the views of those listed in this sub-section and Glaser (1978), Strauss, (1997), and Guest et al., (2006) a fluid plan was put in place to ensure interviews continue to the point of theoretical saturation.
3.9.2 Unstructured interview

An alternative to the tightly controlled structured approach is the polar-opposite unstructured interview, which originated from the ethnographic tradition of anthropology (DiCicco-Bloom and Crabtree 2006). Unstructured interviews afford considerable freedom and scope to move the discussion onto topics and areas that are regarded as significant, enabling both interviewer and participant to describe the situation as they see it, and to provide justification and clarification in their own words (Denscombe, 2010).

Rather than adhering to a fixed sequence of questions, the interviewer typically prepares an interview guide or aide-memories of themes and issues that are to be covered during interview (Bryman, 2012, Fontana and Prokos, 2007). Such an approach is suitable to inductive research as it is an extremely useful method for developing and understanding of yet not fully understood or appreciated culture, experience or setting (Cohen and Crabtree, 2008). It is best used when the interviewer wants to find out as much information as possible; the benefit is that information that may not have been uncovered with a more tightly controlled approach can emerge due to the lack of a formal protocol and a more conversational style (Santiago, 2009).

Unstructured interviews can sometimes be difficult to focus as although the interviewer develops the guide, the agenda is actually set by the participant through the stories and events they choose to tell or not to tell. Also, the participant maintains control of the pacing of the interview, what will be disclosed in terms of detail and scope, and the emotional intensity (Corbin and Morse, 2003). DiCicco-Bloom and Crabtree (2006, p. 315) argue that “no interview can truly be considered unstructured: however, some are relatively unstructured and are more or less equivalent to guided conversations”. These issues can be problematic when seeking to address specific issues or themes, such as the stated CRQ and SRQs, and despite active listening and skillful questioning the interviewer may conceivably not achieve the desired outcomes. Fischer (2003) depicted that the unstructured approach is arguably more suited to exploratory or pure inductive research, which can sometimes be dismissed as academic fishing. Although, the research design was inductive in nature it is predicated on the answering of a CRQ to achieve a stated Aim and supporting Objectives, which is why the unstructured approach was considered inappropriate. Easterby-Smith et al., (2015) suggest that before adapting any method of data collection, it always helps to be clear about the overall objectives of the research. This applies of in-depth interview, as well as to the wide range of ways in which interviews may be conducted.
3.9. 3 Semi-structured Interview

The purpose of both semi-structured and unstructured interviews is to discover rather than check information, which suggests that both are appropriate to this study: however, the semi-structured approach was preferred over unstructured (Denscombe, 2010). This is because the former is considered more appropriate to the achievement of the stated Aim, Objectives and CRQ; the rationale for and defence of this decision will now be made.

The semi-structured approach is a technique often used to collect qualitative data by organising the interview in a way that allows participants the time and scope to talk about their opinions on a particular subject, in this case DCs, with the objective being to understand the point of view rather than make generalisations about behaviour (Sutton and Austin, 2015). The application of this method required a question schedule that employed primarily open-ended questions, some suggested by the researcher and some that arose naturally during the interview with the built-in flexibility as this enabled the necessary in-depth discussion of the participants view of DCs in public procurement strategic activities.

The semi-structured approach offered a number of benefits; firstly a positive rapport could be quickly established between author and participant that allowed emerging themes and issues to be probed effectively (Chrzanaowska, 2002). Secondly, there was high degree of data validity as participants were able to interpret the questions and talk about procurement, processes, procedures, strategy, governance, knowledge management, and individual capabilities that underpin DCs in depth. So meanings behind actions were revealed as there was little direction from the researcher and a process of joint construction of meaning was established (Mishler, 1986). Thirdly, complex questions and issues could be discussed and clarified enabling a rich and broad picture of the participant’s individual views to be achieved (Phellas et al., 2011). i.e. procurement practitioners might not be familiar with the notion of DCs therefore this approach enables the researcher to explain what DCs are and how this study views them. Finally, the problem of the researcher pre-determining what would or would not be discussed was avoided as the participants could and indeed were encouraged to interpret the questions in their own way and direct the discussion how they saw fit (Bryman, 2012; Phellas et al., 2011).

For the purpose of this research semi-structured interviewing was employed based on the list of questions shown in Table 25 that can be addressed in flexible manner (Easterby-Smith et
The interviews provide an opportunities for mutual discovery, understanding, and explanation (Tracy, 2013) of the procurement approach (traditional vs strategic) and how they use high order capabilities in strategic conversion. For this reason the interviews consisted of a set number of broad themes and prompts to be explored to allow such a flexibility rather than a strict set of questions or structured interview protocol. The interview themes and questions, however were adapted according to the role, background of the interviewee.

Table 25: Interview Questions and Procedure

<table>
<thead>
<tr>
<th>Interview Number/Date</th>
<th>Interviewer: Vera Ndrecaj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Participant:</td>
<td>Location</td>
</tr>
<tr>
<td>Organisation:</td>
<td>Rank, Role or Title</td>
</tr>
</tbody>
</table>

**Interview Policy Review**

1. Interview Consent Form
2. Interview Briefing Note
3. Interview Data Capture Policy
4. Data protection Assurance
5. Right to Withdrawal Policy

**Interview Questions**

**Part One: Procurement Maturity Stage**

1. What is the level of procurement involvement in the corporate strategy?
2. What is the scope of procurement activities?
3. What is your approach to relationship management?
4. In what extent technology has been involved in procurement?
5. What is the level of skills and knowledge of procurement professional?
6. What are key performance indicators
7. How visible is procurement on your organisation?

**Part Two: DCS – Sensing, Seizing and Transforming**

**Q1: Sensing:**
1. What analytical systems and individual capabilities are in place that enable the procurement team to learn and sense, filter, shape and calibrate procurement opportunities?
2. What is your approach to the environmental analysis and what aspects are the most important that could determine your strategy?
3. Do you have enough resources and capabilities to deliver the service successfully? If not - how do you manage the existing ones, develop or/and get access to such important elements of the service delivery?
4. What processes are in place to enable you to tap innovation and identify potential suppliers?
5. How do you assess needs?

**Q2: Seizing Procurement Opportunities:**
1. What is the procurement structure, procedure, designs and incentives for seizing opportunities?
2. What is your current procurement model?
3. How important is the role of procurement?
4. Does your procurement strategy fits within the overall goals of the LA?
5. How significant is customer solution and the procurement approach in your organisation?
6. What are the decision-making process in context of tender specification and contract award?
7. How do you plan capabilities required for effective contact and supplier management?
8. What is your current approach to loyalty and commitment with suppliers and citizens?
9. Is long term relationship with suppliers on your current agenda?
10. Tender process and contract & contract and supplier management

**Q3: Transforming Procurement:**
1. How do you continually transform the procurement under current environment? If yes how?
The formulation of the semi-structured interview questions shown in Table 26 were underpinned by the DCs theoretical context drawing upon Teece’s (2007) framework and the research conceptual framework developed in Section 2.4.1 (Figure 14, p. 111) allowing the researcher to explore both concepts; DCs and strategic procurement that are central to the research. The approach also helped the researcher to establish comprehensive process of data codification and analysis. The set of questions in “part one” are designed in the way that enable the researcher to enhanced understanding of the public sector procurement approach (traditional vs strategic) and define the procurement capability requirement (ordinary capabilities vs dynamic capabilities) accordingly. Whereas, the set of questions in “part two” enable the researcher to enhance understanding of three core processes of DCs: sensing, seizing and transforming in procurement context. Teece’s framework also assisted with the subsequent thematic analysis of the data, aligned with the themes identified in the literature review (Guest et al., 2011) and its later presentation in the following chapters. This also allowed the identification of interesting and emergent research themes defined in Table 28.

As indicated from Table 26 six out of seven interviews were recorded using a Dictaphone. The researcher was not allowed to record the interview conducted with the NPS participants. Both NPS participants explained that recording is prohibited on Government buildings therefore instead notes were taken. The semi-structured interview techniques necessitated a flexible approach to interview length so 60 to 100 minutes were allotted.
### Table 26: Details of Interviews and Process Time-Line

<table>
<thead>
<tr>
<th>WLAs</th>
<th>Job description</th>
<th>Duration of interview</th>
<th>Date of the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC1</td>
<td>Head of Commissioning and Procurement</td>
<td>1:15:41</td>
<td>04/07/2017</td>
</tr>
<tr>
<td>CCC2</td>
<td>The Audit and Risk Manager Strategic Procurement Manager Category Management Expert</td>
<td>1:19:55</td>
<td>25/07/2017</td>
</tr>
<tr>
<td>CCC3</td>
<td>Head of Procurement</td>
<td>1:14:12</td>
<td>11/08/2017</td>
</tr>
<tr>
<td>MCC</td>
<td>Strategic Procurement Manager</td>
<td>1:15:30</td>
<td>21/07/2017</td>
</tr>
<tr>
<td>NCC</td>
<td>Strategic Procurement Manager</td>
<td>1:07:33</td>
<td>12/07/2017</td>
</tr>
<tr>
<td>PCC</td>
<td>Lead Procurement Service</td>
<td>1:19:55</td>
<td>25/07/2017</td>
</tr>
<tr>
<td>NPS</td>
<td>Director of NPS Head of Category Management</td>
<td>Recording Prohibited on Government Buildings. The interview lasted 1:38</td>
<td>14/08/2017</td>
</tr>
</tbody>
</table>

### Interview Process Time-Line

<table>
<thead>
<tr>
<th>Steps in Primary Research</th>
<th>Activities</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Interview</td>
<td>Initial contacts were made with participants in May 2017</td>
<td>Confirm their time availability and location</td>
</tr>
<tr>
<td></td>
<td>The interview were scheduled between July and August 2017</td>
<td>Confirm interview dates and location (based on their time availability)</td>
</tr>
<tr>
<td></td>
<td>Send welcome email and briefing note in June 2017 (3 weeks prior to interview)</td>
<td>Participants awareness</td>
</tr>
<tr>
<td></td>
<td>Signing of a consent document covering the interview policy (prior to the interview)</td>
<td>Ethical compliance</td>
</tr>
<tr>
<td></td>
<td>Verbal review &amp; agreement of: - Interview Data Capture Policy - Data Protection Act - Right of Withdrawal</td>
<td>Ethical compliance</td>
</tr>
<tr>
<td>During interview</td>
<td>General welcome and introduction (5-10 mins at the beginning of interview)</td>
<td>Positioning the researcher as an academic and active research on the field</td>
</tr>
<tr>
<td></td>
<td>Commence recording where recording was agreed by participants</td>
<td>Primary data capture</td>
</tr>
<tr>
<td></td>
<td>Review ‘anything to add’ (10 mins)</td>
<td>Making sure that all the important aspects covered: Data capture</td>
</tr>
<tr>
<td>The follow up Post interview</td>
<td>DVR data capture check</td>
<td>Data capture</td>
</tr>
<tr>
<td></td>
<td>Transcription (September 2017)</td>
<td>Data capture</td>
</tr>
<tr>
<td></td>
<td>Post interview – follow up interviews (Telephone calls were made in October 2017)</td>
<td>Clarify certain elements in transcription</td>
</tr>
</tbody>
</table>
Table 26 indicates that the longest interview was the one with two NPS participants, 1 hour 38 minutes, and the shortest one with the strategic procurement manager representing NCC, 1 hour 7 minutes and 33 seconds. The total duration of these interviews was 8 hours and 32 minutes including the interview with NPS participants. However, the researcher was keen to afford the participants the verbal space and freedom to express their views in as few or as many words they deemed necessary, so flexibility was built into the interview schedule and communicated to participants.

Table 26 provides an overview of interview process outlining the sequence of activity within the interview process and also demonstrating that there was a several steps in the primary research. This approach afforded the participants a level of control over the interview, though there was an associated risk that proceeding could go no longer than anticipated (Bryman, 2012). Any negative impacts were mitigated through appropriate management of rapport. Careful probing of the participant by asking another focused question or using the form of responsive encouragement was often more productive, and ensured that the researcher was generally able to direct proceeding without compromising the richness of the data or causing offence to participants. The researcher also was closely guided by the supervisor who observed all the interviews and often interacted with participants during the interview.

The interview transcription process has started straight after the interview. Permission was sought from the participants to record interviews enabling the transcription to be more accurate, but full reliance on the recording of such interviews should be avoided in order to mitigate against an unexpected malfunction of the equipment and to ensure adherence to the question structure and completeness of questions/responses. One disadvantage of recording interviews is the significant amount of time transcription can take, Bryman (2001) suggests that one hour of tape takes five to six hours to be transcribe. This was supported by the researcher’s experience since each interview has taken six hours to be fully transcribed. Interview transcription has be completed by the interviewer in an attempt to not only minimise the risk of incorrectly interpreting responses (Opdenakker, 2006), but also in order to strengthen the validity and reliability of the research.

3.10 Analytical Approach of Primary and Secondary Data

An early study by Fettermann, (1998) claimed that the analysis is as much a test of the researcher as it is a test of the data. This claim is supported by the considerable list of possible
deficiencies and biases humans have as ‘natural analysts’: Data overload, first impressions, uneven reliability, internal consistency and confidence of judgment, to name but a few. This highlights the importance of being able to clearly demonstrate how the researcher gets from the data to the interpretation.

The analytical approach to primary data starts by subsequently transcribing interviews, where, owing to time and resource limitations, selective transcription may be used in order to reduce the significant amount of time this task can take. Cook et al., (1990) and Duranti (2003), claim that selectivity is a practical and theoretical necessity, because it is impossible to record all the features of a talk and related interaction from recordings, all transcripts are selective in one way or another. This has been echoed in an early study by Ochs (1979), indicating a more useful transcript is a more selective one. Quotations, examples, passages and sections of audio, which are particularly pertinent to the research, were noted against the tape counter number and were to be highlighted for subsequent coding and analysis. This study has used two different data analysis techniques (1) Thematic analysis for primary data, and (2) A content analysis technique for the secondary data.

3.10.1 Primary data analytical approach: Thematic Analysis

Thematic analysis is widely used, but there is no clear agreement about what thematic analysis is and its approaches (Boyatzis, 1998; Attribe-Stirling, 2001; Tuckett, 2005). The literature indicates that this method is similar to other ‘branded’ methods such as grounded theory or narrative analysis but often is not explicitly claimed as the method of analysis (Meehan et al., 2000) since it is either presented as discourse analysis or even content analysis. Thematic analysis has been defined by (Braun and Clarke, 2006, p. 6) as a “...method for identifying, analysing, and reporting patterns (themes) within data...organises and describes ...data set in (rich) details”. This method has been employed to provide a more detailed and nuanced account of the research themes within the data. Themes within the data are identified in the inductive way, which means that the themes identified are strongly linked to the data themselves (Patton, 1990) and as such is similar to grounded theory. Braun and Clarke (2006) also claim that this approach is suitable if the primary data have been collected specifically for the research via semi-structured interviews as the themes identified may bear little relationship to the specific question that were asked of the participants and also not be driven by the researcher’s theoretical interest in the area of the investigation.
In this context, the thematic analysis was data driven. The data gathering process started by looking at and identifying patterns of meaning and issues for DCs in public procurement in WLAs. Ryan and Bernard (2000) state that the endpoint is reporting of the content and meaning of themes in the data, however, where themes are abstract and often vague the analysis requires a constant moving back and forward between the entire data set, the coded extracts of data, and the data produced. Writing has been considered to be an integral part of analysis, not something that took place in the end, as it does with the quantitative analysis. Therefore, writing has begun in phase one, with drawing upon the ideas and coding schemes, and continued right through the entire coding/analysis process as suggested by Braun and Clarke (2006). In addition, primary data were analysed using a thematic analysis that sought to identify, analysis, and report patterns across qualitative data.

The thematic analysis method employed in this study has been defined by six phases identified by (ibid, p. 35) the researcher:

1. Being familiar with the primary data: transcribing data, reading and reading data, noting down different ideas
2. Generating initial codes: Coding interesting features of the data in the systematic way across the entire data set, collating data relevant to each code.
3. Searching for themes: Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes: Checking the themes work in relation to the coded extracts (Level 1) and the entre data set (Level 2), generating a thematic ‘map’ of the analysis.
5. Define and naming themes: Ongoing analysis to identify specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.
6. Produce the report: selection of the compelling extract examples, final analysis of the selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

3.10.2 Secondary data analytical approach: Content Analysis

Secondary data are sources of data that has been collected by others (Harris, 2001). The sources of the secondary data depicted in Figure 17 and detailed in Table 27. Additional secondary data was extracted from the relevant items appearing in the press and other media,
and published academic research as suggested by Guest et al., (2011). First, it was necessary to contextualise the data. As such, content analysis was selected to make sense of the data and provide a much needed thematic context prior to be more focused on the three clusters of DCs; sensing, seizing and transforming. Content analysis method has been depicted by Easterby-Smith et al., (2015) as an approach that aims at drawing systematic inferences from qualitative data that have been structured by a set of ideas or concepts. It is also involving the comparison of sections of interview transcripts that are linked to the same idea or concepts, which could be easily codified (Gibbs, 2007). The employment of this method was a significant analytical technique, and a critical element that provided contextual support to achieving the research objectives. Table 27 outlines step-by-step the adapted process following the approach suggested by (Neuendorf, 2002; Burnard et al., 2008; Easterby -Smith et al., 2015).

<table>
<thead>
<tr>
<th>Table 27: Content Analysis Process and Secondary Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content Analysis Process (Neuendorf, 2002; Burnard et al., 2015)</strong></td>
</tr>
<tr>
<td>1 Read and annotate secondary data</td>
</tr>
<tr>
<td>2 Review the notes and list the themes found</td>
</tr>
<tr>
<td>3 Read the list and categorise the themes with a description</td>
</tr>
<tr>
<td>4 Identify links between themes and categorise them as major or minor</td>
</tr>
<tr>
<td>5 Compare and contrast major and minor themes</td>
</tr>
<tr>
<td>6 When all the data are reviewed collect all themes and ensure they fit and are relevant</td>
</tr>
<tr>
<td>7 Review major and minor themes to see if any themes need to be merged or sub- categorised</td>
</tr>
<tr>
<td>8 Return to the data to ensure nothing has been missed</td>
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</table>

In this context based on the literature review and the five research objectives the initial template was created as navigation of the data analysis progression. Table 28 show the template that identifies the priority themes and sub-themes of the research. The template consists of three
main groups of themes and sub-themes that emerged from the critical evaluation of the literature review and interview questions.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1   Public procurement approach</td>
<td>New strategic approach</td>
</tr>
<tr>
<td>2   DCs</td>
<td>Sensing, Seizing, Transforming</td>
</tr>
<tr>
<td>3   The Microfoundations of DCs in strategic public sector procurement context</td>
<td>Sensing, seizing and transforming in procurement perspective.</td>
</tr>
</tbody>
</table>

The first theme aims to provide evidence on the procurement maturity stage and strategic processes identifying new strategic approaches. This enables the researcher to find evidence of DCs assessing the differences from the existing theory. The second theme has three lower categories/level also codes based in the literature review and the research objectives. The sub-theme consists of three clusters of DCs: sensing, seizing and transforming that indicate components of the microfoundations of DCs’ in the six WLAs procurement. Consequently, DCs clusters enhance our understanding of the operationalisation of DCs in PSP, and how they have simultaneously been strategically converted. Finally, the third theme consists of one of the main objective of the research that is to understand how LAs use DCs in strategic conversion creating the foundations of DCs in strategic public sector procurement context. Teece’s (2007) framework will be used as a tool to map procurement microfoundations. The theme goes some way to providing a confirmation of the application of Teece’s (2007) conceptual framework discussed in chapter 2.

However, the initial template underwent updates as the analysis proceeded, producing the final templates. The researcher coded the transcripts under the existing themes when identifying the issues in the text related to them. New themes were added when the issues in the text were not covered by an existing theme. The details of the findings from the data analysis defined the final template and provided evidence from the interview programme.

The above indicates that a pragmatic approach towards the data analysis. Data were analysed manually despite the fact that the initial plan for analysis of the qualitative data within this study was to make use of NVIVO for Mac that is available to process large sums of raw
qualitative data from a word-based perspective. The researcher followed the traditional approach since she was inclined to enhance her understanding of the data.

3.11 Research quality: reliability, validity and generalisability

3.11.1 Reliability

Reliability is important to ensure that if another researcher were to replicate the study consistent findings would be produced (Bryman and Bell, 2015). Conditions for reliability are met if the findings and conclusion of a research project can be replicated by another researcher doing the same case study. This has been supported by Bryman (2008; 2012) claiming that case study generalisation is made more feasible by a group of researchers investigating a number of cases. Gray (2014) suggests that this can only be achieved if researchers conscientiously document procedures such as case study protocols and the case studies database. The protocol is a plan of data collection instruments and also the procedure for using these instruments (Gray, 2014). Four stages of the protocol have been suggested by Yin (2009; 2013);

1. An overview of the case study project including objectives and theoretical issues
2. Field procedures, including: access to the case study
3. Case study questions, table templates for collecting data and potential sources of information for answering each question
4. Structure and guide for the final report

Saunders et al., (2012, p. 192) argue that there are four threats to reliability; ‘participant error’, ‘participant bias’, ‘researcher error’ and ‘researcher bias’, which must be addressed within research design. To mitigate participant error interviews were scheduled within office hours wherever possible. However, due to the participants’ roles this was not always possible. Some interviews took place at emergency services premises out of hours and during working shifts. Access to refreshments and flexible time allocation ensured that both the author and the participants were as relaxed as possible, and participants could drop in and out of any interviews to deal with operational matters, or reschedule instead of feeling pressured to rush the interview.

Participant bias, whereby a false answer may be induced, was an important consideration, although, given the adopted interpretivist paradigm the focus was on gathering their views
Most interviews were conducted in a quiet office in a secure location, which reduced the likelihood of participant bias. Only one interview was conducted at the researcher’s office for the participant’s convenience. However, flexible administration and timing ensured appropriate conduct.

The issue of qualitative ‘reliability’ is more complex. Gibbs, (2008) suggests the checking of transcripts, ensuring there is no drift in definition of codes and crosschecking of codes (the countering of this issue was acknowledged and discussed in section 3.8.1. Others recommend documenting procedures; the production of detailed case studies material and databases, so that others can follow the procedures (Yin, 2009).

Researcher error and bias are also significant factors that must be incorporated into the research design (Saunders et al., 2012). Researcher error pertains to anything, which may alter the researcher’s interpretation. Whereas, research bias, refers to the researcher allowing his/her own subjective view to influence the outcome of the study (Bryman and Bell, 2015; Saunders et al., 2012). Researcher error was mitigated by knowledge gained from the research undertaken at the Procurement Best Practice Academy in relation to public sector procurement. Thus, the author was well prepared and versed in the language and culture of procurement management, minimising the likelihood of error.

Reflecting the adopted interpretivist paradigm, the notion of a truly unbiased researcher was rejected (Williams, 2000). This study focused on collating the personal views of participants on DCs in the context of public procurement. Accordingly, the research design accepted that as a non-procurement practitioner the author had relevant views and biases. As such, the question schedule design and conversational interview style afforded participants the requisite freedom to express their views, discuss, challenge and debate varying perspectives, as indeed this was the essence of the study.

3.11.2 Validity

Validity refers to the quality of the conceptualisation and operationalisation of the relevant concept (Gibbert et al., 2008), that is, the extent to which the study investigates what it claims to investigate. Bryman and Bell (2015, p. 170) claim that, “validity refers to the issue of whether or not an indicator (or set of indicators) that is devised to gauge a concept really measures that concept”. However, Yin (2009) claims that validity is particularly problematic
for case studies, because the difficulty of defining the constructs being investigated. The problem here is that the researcher will base the definition on her subjective view. Consequently, the research design incorporated four steps following Yin’s (2009) approach to ensure validity:

1. The researcher operationally defined DCs in the context of the research project. This project draws up on Teece’s (2007) definition and conceptual framework consequently, the researcher has an explicit definition of the concept however, in this study the concept was extended into public sector procurement with the intention of contributing to theoretical development.

2. Appropriate measurement instruments for the defined concept were selected. Interviews with members of procurement teams that are involved in strategic procurement.

3. Multiple sources of data were used in a way that encourage divergent lines of inquiry. Primary data emerged from interviews, observation and documentation.

4. A chain of evidence was established during the data collection processes linking findings and recommendation to the data, providing evidence that the two are connected.

Conversely, the issue of generalisability is perhaps more of a positivist concern (Easterby-Smith et al., 2015). In the case of this interpretivist study the findings are a snapshot of the views, opinions and perspectives of the sample-frame within the geographic remit and time-frame of the study. Thus, the results are not generalisable to strategic procurement management as a whole. However, steps were taken to increase the relative generalisability. The organisational sample-frame was as broad as was practical, and all levels of the strategic procurement management structure were engaged. Also, participants from each organisation were interviewed to allow for an element of triangulation (Bryman and Bell, 2011). The aspect of ‘generalisability’ is not commonplace in qualitative research as the fundamental purpose of this type of inquiry is not to generalise findings to places or people outside of the specific area of study. Unlike experimental research where generalisability is a core feature, here it is particularity over generalisability (Greene and Caracelli, 1997).
3.11.3 Generalisability

Generalisation is widely acknowledged as a quality standard in qualitative research “...making inference about the unobserved based on the observed” (Polit and Beck, 2010, p. 2). On the other hand Payne and Williams (2005, p. 296) assert that “...to generalise is to claim that what is the case in one place or time, will be so elsewhere or in another time”. However, they further argue that the goal of most qualitative studies is not to generalise but rather to provide a rich, contextualised understanding of some aspects of human experience through the intensive study of particular cases. An early study by Yin (1994) claim that the generalisability of research finding has been a major critique of qualitative case study designs, and has been defined as the extent to which the findings can be generalised “beyond the immediate case study” (Yin, 1994, p. 35). One might argue that generalisability is not the main purpose of qualitative research due to the focus on investigating a phenomena within its particular context. It is important and necessary element of reliable research (Mayring, 2007).

Despite the ongoing debate generalisability in qualitative case study research can be achieved in two main ways: (1) analytic generalisation rather than statistical, where “the investigator is striving to generalise a particular set of results to some broader theory” (ibid, p. 36); and (2) the degree to which research findings are applicable to other populations or samples (Ryan and Bernard, 2000). First, in the light of this research, analytic generalisability is achieved through relating the research findings to a robust and comprehensive theoretical framework, discussed in Chapter 2 ‘The Conceptual Framework’. The framework has allowed for the systematic investigation of research data, which can be applied on future research investigations and contexts to achieve analytical generalisation. Secondly, as argued by Yin the use of a multiple-case study research design is considered as a more compelling and robust alternative to single-case studies (Yin, 2009).

3.12 The Research Ethical Consideration

Research ethics refer to the standards of behaviour that guide the researcher in relation of the rights of participants (Bhattacherjee, 2012; Saunders et al., 2012). The term ‘ethics’ refers to general principles as to what people ‘ought’ or ‘ought not’ to do. Both terms are closely related and Remenyi et al., (2011) define ethics as a branch of philosophy, which addresses issues of human conduct, related to a sense of what is right and what is wrong. Building upon an earlier study by Thomas (1996); Berry (2004) claims that the philosophical foundations of research
ethics also illustrate that a researcher’s conduct may be open to competing and conflicting philosophical positions. They identified two contrasting philosophical positions: deontological and teleological. The first one is based on following rules to guide a researcher’s conduct, which means that acting outside them cannot be justified. In contrast the teleological approach argues that deciding whether an act of conduct is justified or not should be determined by its consequences rather than a set of rules. Ghauri and Grønhaug (2005) and Saunders et al., (2012) suggest that ethics in research is the behaviour that will guide ones conduct in relation to the rights of the participants and those who may be affected by it. An early study by Wells (1994) claims that all research, whatever discipline it is based in, has to work within general principles of acceptable behaviour and practice. Research ethics is about adherence to a ‘code of behaviour in relation to rights of those who become the subject of the researches’ work or are affected by it.

Consequently, Denscombe (2010, p. 306) asserts that

“social researchers are expected to approach their task in an ethical manner; on moral grounds, this expectation stems from the belief that the public should be protected from researchers who might be tempted to use any means available to advance the state of knowledge on a given topic.”

This view has been also followed up in the latest publication in 2014. May (2011, p. 47) also highlights the importance of ethical social research depicting ethics as “...fundamental in maintaining the integrity and legitimacy of research in society and in protecting practitioners and participants in its practice.”

Since than various frameworks of considerations to be taken into account have emerged. Ten ethical principles has been developed by Saunders et al., (2012, p. 231; 232) to recognise ethical issues that occur across many different approaches to research: First, integrity and objectivity of the researcher; second, respect for others; third, avoidance of harm; fourth, privacy of those taking part; fifth, Voluntary nature of participating and a right to withdraw; sixth, Informed consent of those taking part; seventh, ensuring confidentiality of data and maintenance of anonymity of those taking part; eighth, responsibility of the analysis of data and reporting of findings; ninth, compliance of management of data and tenth, ensuring the safety of the researcher.
Alternatively, Bryman and Bell (2011, p. 128) refer to the early study by Diener and Crandall (1978) broking the “ethical research” down into four areas: First, whether there is harm to the participants; second, whether there is lack of informed consent; third, whether there is an invasion of privacy; fourth, whether there is deception involved.

Accordingly, an Ethical Statement was submitted to the University of South Wales Research Programme Committee and approval was granted in summer 2013. The basis for the Ethical Statement was an overt assurance that research activity within this study would not contravene any of Diener and Crandall’s (1978) four areas of ethical research outlined above. The ethics strategy was communicated to the participants in a welcome letter and a briefing note, which were disseminated to participants two weeks before each interview to allow time for assimilation and the clarification of any questions. The strategy included four elements and is detailed below:

3.12.1 Informed Consent

Participants were advised of the research focus, design and intent within the welcome letter. At the commencement of each interview the DVR was started, the author explained the Informed Consent Form allowing for any questions to be asked, and then the participant were asked to sign the document. This approach secured both written and verbal consent adhering to the ethical parameters of social research suggested by Bryman (2012) and Denscombe (2014). Participants were always aware that the research was been undertaken to study procurement capabilities in the context of a DCs conceptual framework that disaggregates these capabilities in three clusters: sensing, seizing, and transforming. Consequently, the distinct procurement skills, procurement processes, strategies, procedures would be in focus during the interview.

3.12.2 Right to Withdraw

Participants were advised of their right to withdraw from the study at any point, and assured that no questions would be asked. This was clearly articulated within the welcome letter and interview briefing note, this assurance was also reviewed at the beginning of each interview, and the respective discussion captured on the DVR recording (Wiles et al., 2011).
3.12.3 Confidentiality and Anonymity

Saunders et al., (2012) suggest that the avoidance of harm (non-maleficence) can be seen as the cornerstone of the ethical issues that confront those who undertake research. For example, the way consent is obtained, confidentiality is preserved, data is collected from participants and the way in which the data is used, analysed and reported, all have the capacity to cause harm to participants. The following section will discuss what steps have been taken to address these issues. The confidentially and participant anonymity was assured through the coding strategy applied for both the participants and WLAs, which prevented the identification of individual participants and their parent organisations (Saunders et al., 2008). When confidential comments were made to maintain confidentiality and anonymity initials of participants were blankout.

3.12.4 Data Security

To minimise the risk of a data security breach through the inadvertent loss of a DVR a 2-fold strategy was implemented. Firstly, the names of participants were not used during DVR recording. Rather, the researcher stated the organisational code and participant number and opened each recording with the date, time and generic location (i.e. Cardiff, Newport, USW Treforest Campus, Carmarthenshire, Monmouthshire and Caerphilly to prevent identification in the unlikelihood that unauthorised access to recordings took place. Secondly, on completion of each interview the author connected to the University of South Wales server through the Remote Desktop Connection (RDC) whilst in the secure interview room, and uploaded the voice recording to a secure password protected location and deleted the file from the DVR (USW IT Services 2017). Where remote access was not possible, the author secured both DVRs in an internal pouch within an equipment bag. This was then secured with a small padlock to prevent any accidental loss during transit, and the voice recordings were then uploaded to the server at the earliest possibility, and then from the DVR.

As suggested by Saunders et al., (2012) for the purpose of the research the ethical issues have been considered important throughout the research. Table 29 indicate ethical issues at specific stage following the Saunders et al., approach.
3.13 Conclusion

This chapter has outlined the methodological approach adopted in this thesis as summarised in Table 30. This approach facilitated the investigation of the DCs microfoundations in public sector procurement strategic activities. This study adopts interpretivism as a theoretical paradigm since it intends to enhance understanding of the phenomenon contributing to the theoretical development following inductive logic and use a qualitative method. The multiple case study strategy engaging purposive sampling is detailed in section 3.8. The data collection and analysis techniques were defined and detailed in section 3.9 and 3.10. The ethical considerations of this study have been discussed in section 3.12 as have the challenges encountered during the data capture and analysis phases.
Table 30: Summary of the Research Methodology

| Research Aim: “To investigate DCs in strategic procurement in order to critically assess how Local Authorities use DCs in strategic conversion process” |
| Research Question: “How public-sector organisations use DCs in strategic conversion processes?” |
| **Philosophical position** | Epistemology & Ontology |
| **Theoretical paradigm** | Interpretive |
| **Logic approach** | Inductive |
| **Methods** | Qualitative |
| **Strategy** | Case study: Multiple case studies (six LAs in Wales) |
| **Sampling** | Non-Probability sample: Purposive sampling |
| **Design** | Exploratory |
| **Time horizon** | Cross-sectional |
| **Data collection techniques** | Semi-structured interview, observation, and archive |
| **Data analysis techniques** | Thematic Analysis (for primary data) Content Analysis (secondary data) |
CHAPTER 4: RESEARCH FINDINGS

4.0 INTRODUCTION

This chapter presents the findings following the theoretical context and methodological approaches identified in Chapters 2 and 3. The findings are organised based on themes and sub-themes as shown in Table 28, p. 168. The discussion is based on qualitative data discussed in detail in section 3.4, p. 144. Primary data have been gathered through semi-structure interview and secondary data have been gathered from sources discussed in chapter 3 (section 3.10.2, p.165). Both primary and secondary data have been analysed using an appropriate approach: Thematic analysis has been employed for primary data and content analysis for secondary data. Findings will be illustrated with six case studies on procurement in selected LAs (see section 3.7.1, p. 152. For each case study the following key aspects are addressed: (1) an overview of the organisational in a procurement context including a brief background and description of the procurement structure, number of procurement team, total spend in goods, services and work highlighting some of the main category spend per each LA, (2) current challenges including skills and capabilities, (3) activities used to sense the environment spotting opportunities, (4) activities used to seize these opportunities and (5) activities used to transform – continuous improvement. The structure of individual cases may varies according to their procurement approach and unique aspects.

This approach provides detailed evidence of the findings. This also shows how the researcher gained an understanding of activities associated with strategic procurement processes, and how LAs use DCs strategically. The findings show the consistency with the previous theory on DCs and strategic public sector discussed in chapter 2. This suggest promising contributions to theoretical development and also public sector management amalgamating two different research components DCs and PSP.

4.1. Thematic Analysis

4.1.1 Theme One: Changing role of public procurement

The main purpose of the first part of the interview process was to understand the changing role of procurement and related strategic approach knowing that all respondents hold strategic procurement roles therefore will be able to provide reach information. All respondents claimed
that due to budgetary restriction and other current environmental pressures the role of procurement is changing, moving from routine transactional purchasing to strategic supply management, where LAs have a thorough understanding of requirements of the supply market, and are able to establish their strategic positions towards collaborative procurement via partnership or shared – services building high-level capabilities. In some respects the dynamic environment has been detrimental to the advancement of the procurement function since some LAs have reverted to an obsessive focus on cost cutting at the expense of other critical factors such as risk, sustainability and overall value to the business. This means that while procurement could have a significant short-term impact on costs by putting pressure on suppliers to reduce prices, this could only be short-term and can sometimes damage the relationship with suppliers that might have taken a long time to establish. Although, this is not the case for all WLAs since a respondent (HP) stated:

“…if you would ask me four years ago I would have said we were moving to strategic procurement, but the world of procurement moved on and because of austerity, I don’t believe that public sector organisations in general have moved on with it. There is too much nervousness with it.”

This indicates that WLAs are under financial pressures, seeking a new approach not only to enable them to react but also to become more proactive and futuristic. This is an approach that could enable LAs to become more flexible and adaptable delivering high performance under such conditions. This was echoed by a respondent (HCP) claim:

“Despite the austerity agenda the maturity stage of our procurement has reached a strategic level. Procurement is actively engaging in shaping organisational strategy and transforming the way how we annually spend £380m a year procuring goods, services and work from over 8,000 suppliers and contractors. The transformation strategy builds on the successes delivered over the last four years including the full implementation of CM to deliver cashable savings and improve procurement performance.”

This depicts that in reality there are mixed views towards the changing role of procurement despite the fact that all participants acknowledge that the changing role of procurement is evident since it encourages innovation and determines the strategy of the LAs particularly in
the current dynamic environment. To rise to the challenge local government procurement needs to modernise in terms of scope, the use of technology and improve practices and procedures. Councils are dealing with significant reduction to finances and increasing demand for services. They recognise the need to change using innovative approaches that determine the changing role of procurement. In order to demonstrate leadership of key spend categories to address financial pressures, to drive market management and to develop new models of service delivery through procurement, councils are increasingly adopting a CM approach as a starting point to identify key spend areas. Nine out of the eleven respondents claimed that they are using CM as a vehicle to transform the public procurement (HCP, ARM, SPMI, CMO, SPM2, SPM4, LPS, DNPS and HCM). Only two out of eleven participants (SPM3 and HP) were very sceptical about the CM approach. However, six out of nine participants confirmed that they are only partly implementing the CM approach due to capacity constraints (ARM, SPM1, SPM2, CMO, SPM4 and LPS). Three participants (HCP, DNPS, and HCM) claimed:

“we are fully implementing CM as a vehicle to drive the strategic role of procurement based on three principals: 1) Acting Smart; 2) Buying responsibly; and 3) Collaboration and Engaging”.

When asked for further elaboration on these principles they shared the same view, explaining that the first principle involves ensuring that staff have what they need to perform such as procurement skills and knowledge. The principle also is concerned with continuing innovation and challenge of traditional delivery models to enhance value while acting socially responsible. The second principal is associated with the buying approach making sure that WLAs buy what is needed to deliver value for money ensuring that they have an appropriate level of control and the staff to comply with legislation. In addition, the principle involves assessing the environmental impact minimising any negativity. The third principle involves collaborating and engaging with staff across the local authority to supporting and encourage innovation complying with legislation and guidance, and most importantly support effective collaboration across the public sector, and with suppliers, contractors, service providers and the users of the service to drive continues improvement, innovation and greater value. This suggests that both organisations (CCC1 and ...) have managed to build enough resources and capabilities to fully implement the strategic approach establishing an ambitious programme to innovate procurement through a CM approach.
However, some of the respondents expressed their scepticism towards the approach since this could be very challenging for small procurement teams - i.e. NCC and MCC have relatively small centralised procurement teams that would find it very challenging to fully implement CM as a vehicle to facilitate a strategic approach to procurement since the wider scope of the procurement activities such as commissioning and other commercial activities challenges both the capability of their staff and the organisational capacity to deal with these activities. A participant (SPM4) who represents a very small procurement team asserts:

“...due to the size of the central procurement team we only could be involved in areas such as providing guidance, developing processes and a standardising of the procurement approach. However, much procurement activity i.e. contract management will be carried out by departments, some who have considerable experience, but such other activities are often difficult to manage.”

This suggests that WLAs, tend to devolve procurement responsibility to certain disciplines and departments where the value of spend is considerable i.e. construction, social services and education and where procurement is undertaken as part of a wider job description. For example, CCC1 estimates that of 18,000 staff, 1500 have some direct involvement with procurement and payments processes. Such personnel have their own role in the LA and do not regard themselves as professional buyers and would not seek professional qualifications. Although, one of the LAs in the sample has recognised the need for training these people and now offers a range of short-courses to enhance the skills levels of these part-time procurers.

In contrast, participant SPM3 declares:

“CM doesn’t exist...there is no CM and there has never been. I am not 100% sold on CM if I am honest. I think they tend to go native in whatever the industry they sat in. They tend to be a little bit parochial, is my observation. The way to go forward to transform procurement and continue delivering good value for money is ‘Strategic Sourcing’ since it is all about making the right procurement decision, in terms of satisfying business needs from our market via a proactive and planned analysis of them and suppliers therein. This will deliver far better outcome for our Council.”
This indicates scepticism towards the CM approach due to the lack of capabilities to fully implement the approach. The statement challenges a procurement strategy document 2016/19 in which a CM approach has been seen as a vehicle to transform procurement. The Procurement Strategy 2016/19, p. 6) made a comprehensive statement “Strategic Procurement has adopted a CM approach aligned to our Service Directorates”. This raise concerns in regards to their approach since the participant’s view does not fully reflect the procurement strategy statement therefore it is not clear to what extent the CM approach fits their organisation. This also indicates that a small procurement team lacks the depth of capability, particularly management capabilities, to function effectively at both the strategic and operational levels within full implementation of the CM approach. This could have two possible consequences: First, there may be an tendency for senior staff to be drawn into a traditional approach managing fulfilling day-to-day tasks focusing on the operational delivery, and neglecting opportunities and the need for strategic change and improvement.

HP represents a relatively large centralised procurement team but shares a similar view towards CM approach. HP asserts:

“I don’t believe that implementing a CM approach enhances procurement value or transform the role of procurement... I don’t believe that it works since I haven’t seen anybody that succeeded with it and what does it mean anyway? ...I cannot get anyone out there academic or procurement expert to say what CM could bring to my organisation, because nobody could tell me, I looked at it in detail, and so I don’t see the need. What I looked at my shaping and my spend is into directorates because what you normally find is the environment will always be the same categorisation anyway so it going to be your highway’s, road infrastructure, buildings, so is similar product ranges anyway so that you get your buyers and your senior buyers who knows this category type area and work there... I don’t understand what people call category management and how different it is in my LA.”

This indicates that WLAs can differ in their procurement strategic approaches endeavouring to find their own unique approach which enables them to respond to a complex and uncertain environment. Some might be starting out on the journey to advance their procurement from a clerical function to become strategic leaders, whilst others have been on the journey for
numerous years, having reached a greater level of procurement maturity and performance and still others are in the transformation mode. i.e. data indicates that some procurement manager are not fond of the CM approach, whereas, CCC1 and CCC2 are working towards the full implementation of CM approach in order to ensure the effective utilisation of resources. In contrast, SPM3 stated that,

“CM approach is part of our procurement strategy, although, it is not fully implemented due to resource constraints. I have only 3 members of staff, which makes it impossible to cover all the aspects of the approach, and then we end up covering only the operational bit.”

This indicates that small procurement teams might not have the expertise necessary to fully implement the CM approach or to provide particular services. They may lack both resources and unable to meet any demand to employ specialists covering all the requirement areas of a service. This means that they are not able to provide the full range of services well or at all. This also has been echoed in the Williams Report (2014). However, this study does not claim that smaller procurement teams provide worse services than large ones since there is no evidence to prove it.

The evidence suggests that where there are central procurement departments with qualified staff e.g. CCC1 and CCC2 there is more likely to be a strategic approach to procurement finding ways of building the necessary capability and capacity that could be used strategically to enable LAs and NPS to achieve their objectives. Another participant (SPM4) who represents a small procurement team share the same view towards the CM approach claiming:

“I am not a big fan of CM. I don’t think it works particularly when the procurement team is small…nonetheless, despite the relatively small size of the procurement team and the lack of other resources we are committed to continue to transform the way we buy goods, services and work through partial implementation of a CM approach amongst other procurement processes, in line with the “Gateway Process”; at the same time maintaining standards, and an open and transparent approach to the way we implement it”
There was a general agreement between participants in regards to the immediate need to move away from the traditional procurement approach involving commissioning, procuring and delivering service. Recognising the need to embed high-level capabilities are at the heart of procurement activities but also, they were aware of the dynamic environment, which impacts the speed of the change. In contrast, PCC recognised an inactive role for procurement through developing a more ‘arms-length’ approach. This indicates that despite the current challenges their procurement is still in transactional mode. PCC also distinguish from other WLAs since he claim that they are a commissioning authority implementing the model that enables them to deliver the best service for residents in PCC “...it is quite distinct and different position from the reality.” (Participant LPS)

In contrast, CCC1 and NPS have managed to build resources and capabilities needed to fully implement the commissioning approach using CM to deliver it. HCP claimed that

“*We were able to secure resources, build procurement capabilities and restructure the team into strategic, operational and transactional to cover and enable the implementation of each strategic level of CM.*

”

It was recognised that the approach is significant if the Council was to retain access to skilled and knowledgeable procurement staff within the proposed budget. The first attempt was to create the first Local Authority Trading Company in Wales, Atebion Solutions Ltd, to deliver procurement and commercial services to both the private and public sectors across the UK. Although, the financial challenge was the catalyst to developing a new procurement approach the claimed level of support from Councillors and senior managers meant that the level of ambition for the company has increased and is seen as a way of not only retaining staff but building the breadth of expertise and knowledge by recruiting additional staff. This includes establishing a graduate programme, which will allow the Council to continue to ‘grow’ its own staff for the future. They believe that new opportunities exist in public sector procurement as organisations increasingly focus on their key in house procurement competencies and look to bring in specialist procurement expertise as required to maximise their diminishing resources. Atebion Solutions was established in the summer of 2016 and is already providing a range of service to five English and Welsh local authorities. It continues to be a steep learning curve but Atebion Solutions has already exceeded its income target for year 1 and it was claimed the staff are thriving in this new environment.
HCP further states

“...in term of a procurement capability context strategic procurement leadership and organisational structure plays a significant role in this because strategic procurement leadership leads the development of a procurement professional, strategic value adding function enabling the delivery of organisational business objectives and optimising procurement quality, productivity and performance outcome”

The statement indicates that strategic procurement leadership capabilities are significant in terms of establishing a comprehensive procurement vision and direction of procurement to meet citizen’s needs widening the scope of procurement across the authority. This also could be seen as an important in term in the establishment of an appropriate governance mechanisms at an operational level to drive effectiveness across the authority and encourage continues improvement by changing procurement policy, processes and practice to achieve VFM, community benefits and other objectives.

However, a unified view among participants in term of strategic procurement leadership indicated that “…you can call it as you like but in the context of public sector procurement we go as far as ‘best practice’ since there are immense opportunities to inject ‘best practice’ and innovation into procurement. However, this is not to argue for a single, predominant focus on any one best practice lever. It is vital that a range of fit-for-purpose options and interventions are applied. Fortunately many of these are readily available to policy-makers and procurement/commercial practitioners. This indicate that a CM approach could be suitable for those LAs that are able to develop and deploy high-order capabilities such as collaborative capabilities, supplier and contract management capabilities, and innovative capabilities that require transformational leadership and cultural change. This is essential for those WLAs aiming to enhance their performance or achieving competitive advantage. However, if the capabilities of the organisation do not meet customers’ needs, at least to the threshold level it will be difficult for them to meet customers demand: and if managers do not manage costs effectively and continue to improve on this, it will be vulnerable to those who can.
Findings also indicate that WLAs share common goals and face common challenges including continued budgetary constraints and an increasing demand for services, resulting in the ongoing need to deliver efficiency savings becoming more commercialised and widening the scope for specialisation. This indicates that the commercialisation of public sector procurement required a specific set of capabilities enabling them to undertake such activities successfully. i.e. Commercial negotiation capabilities are significant in term of leading stakeholders in the development a robust negotiation plan aiming to support the process for complex procurement negotiations that contributing to the effectiveness of procurement. This is another indicator that WLAs are moving away from unified approaches since their ability to engage in such activities is determined by the procurement capability set i.e. SPM3, SPM4, and HP have reservations towards the commissioning approach. SPM3 depicted:

“...commissioning is not the way to move forward...we are here to provide a good public service, we are not here to run casinos, pubs or cosmic concerts, that is not what I am here for...”

On the other hand, HP claimed:

“...commissioning means different things to different people...organisations tend to invent their own versions of commissioning and there is no definitive cross-section standard...However, these are only philosophies in our heads, what is essential to remember is our ability to implement CM or be involved in commission activities largely depends on the size of our procurement teams.”

Another participant states:

“...the commissioning approach has been supplemented with CM with the intention to build the skills and expertise necessary to cover all areas...although, we are not there yet since it requires high-level skills and expertise that takes time to develop...the process they went through with the largely demonstrated a real failure of a commissioning approach which was due to the lack of processes, and accurate data...not much information given to providers therefore they did not know where to start causing a major issue.”(Participant LPS)
The participant elaborates further on this by defining their approach as follow:

“...to overcome current challenges and meet strategic priorities (Citizen Focus; value for money and efficiency; economic, social, and environment wellbeing; and governance and risk) we have established a Strategic Direction working on three strategic procurement principles: Commissioning. Category Management and Strategic Sourcing.”

Whereas, participant SPM3 stated:

“With the growth of procurement, commissioning and other commercial activities across the council, we need to raise both the capability of our staff and the capacity we have to deal with this activity which remains challenging for a small LA like ours”.

This highlights again, not only the importance of strategic capabilities in public sector organisations, but also the importance of the strategic use of existing ones. If the LAs seek to enhance their performance or to build competitive advantage it must have capabilities that enable them to add value to their services requires.

Nonetheless, all participants expressed their concerns in regards to the financial pressures faced by WLAs that inevitably impacts on the procurement team. Due to the austerity agenda, LAs are under pressure to make effective savings by reducing the number of procurement professionals. As a result the loss of procurement expertise and high level skills is inevitable. Therefore, in response to the budget settlements in an attempt to retain the procurement expertise a new approach is required enabling WLAs to continue building new resources and capabilities i.e. in 2014/15 CCC1 to respond to budget restrictions the procurement team was given a three -year saving target which would equate to the reduction of eight to twelve posts.

However, in line with the McClelland Report (2012) the council recognised the importance of exploring new opportunities to retaining the expertise. HCP echoed that:

“New opportunities exist in public sector procurement as LAs increase focus on their key in-house procurement competencies/capabilities and look to bring in
specialist procurement expertise as required to maximise their diminishing resources…”

However, for other WLAs particularly the small Authorities this remains very challenging i.e. three participants (SPM3, SPM4 and HP) claim:

“Procurement team will reduce next year due to the saving that I have to make (SPM4)...20% savings out of the budget as a result the team will reduce by 2. This mean that we have to change the structure and supporting mechanisms to the organisation (HP)...we have two category managers, one for place and one for people, and also, we have a category officer to wrap everything else up. We also used to have a corporate category manager but the post was taken away as a savings last year.” (SPM3)

This shows that a new approach is required to address the current changes transforming the way that LAs are procuring. WLAs are under pressure to make every effort to deliver more with less resource through procurement transformation, enabling effective delivery of VFM and to drive local social and economic growth and regeneration, and also providing an inclusive service through a diverse supplier base. Doing business as usual in the current dynamic environment would be very challenging task. Data indicates that LAs have put more restrictions on the operation and execution of their supply chain activities. Although, when asked to what extent procurement transformation is a priority agenda for their LAs, a respondent said;

“We are aware of the need for change in procurement improvement practice across the sector and that some councils are ahead of procurement transformation adapting commissioning approaches which deliver savings for local communities. However, the main enables for such transformation is our culture and leadership. My concern is that more need to be done and that not all are procuring so as to achieve maximum value for money. Councils must ensure that they have an appropriate mechanism in place to enable them to measure the cost and savings of their procurement exercises so that they can evaluate the extent to which they are using optimum approaches.” (Participant HCP)
Table 31 provides an overview of the size of the procurement team and strategic approach indicating that MCC, NCC, and CCC2 have relatively small teams. However, since June 2017 CCC2 and Pembrokeshire collaboratively established a new-shared service model, strengthening procurement capabilities (See Case study 2). Although, the evidence shows (i.e. Government Association Report, 2014) councils have been encouraged to establish partnership and collaborative arrangements for at least a decade many of them have been doing just so for much longer moving to more joint and integrated approaches. NPS and CCC1 have the largest procurement teams followed by CCC3 which could be seen as advantage towards the full implementation of a CM strategic approach, however, in certain areas they are working collaboratively with other LAs or service providers as a necessary approach to respond to increasing demands and expectations.

<table>
<thead>
<tr>
<th>Welsh Local Authorities</th>
<th>Size of the central procurement team</th>
<th>Strategic Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC1</td>
<td>29</td>
<td>Strategic Commissioning procurement implementing Category Management approach</td>
</tr>
<tr>
<td>CCC2</td>
<td>10 with Pembrokeshire since they introduced ‘Shared Service’ model in June 2017</td>
<td>Category Management (partly implemented)</td>
</tr>
<tr>
<td>CCC3</td>
<td>16</td>
<td>Procurement is recognised and managed as a strategic corporate function implementing Directorates as a strategic approach</td>
</tr>
<tr>
<td>PCC</td>
<td>9</td>
<td>Category Management (partly implemented) Commissioning activities</td>
</tr>
<tr>
<td>NCC</td>
<td>3</td>
<td>Category Management (although they have expressed their concerns in regards to the outcomes of the approach)</td>
</tr>
<tr>
<td>MCC</td>
<td>2</td>
<td>Strategic Sourcing</td>
</tr>
</tbody>
</table>

Data also indicates that WLAs are working to establish central procurement teams, although, some of procurement activities remain devolved. While MCC, due to the size of its procurement team, implemented a decentralised structure building a procurement networking with 10 procurement officers outside the council. As a result there is no leverage across the LA and there is no real ability to manage spend areas and as such; the focus is on supporting local business needs rather than investing in the development of buyers and the procurement team due to it small, operational and local focus.

When a participant, SPM4, was asked to define his authority’s procurement approach his response was “Procurement has been seen as a strategic organisational function”. Their
strategic approach also differs from the rest of selected authorities in moving into the strategic sourcing domain, which, the increased return on procurement is typically used to justify greater investment in procurement leaders and teams. The role of procurement staff in strategic sourcing context includes the ability to align internally, engage business leaders, work cross-functionally, think strategically, and manage complex tender processes from specification to implementation. This indicates that the team of 2 represent the lack of capability to carry or/and widen procurement activities, and raises questions about the ability to even accomplish the current ones.

The differences remain i.e. PSM3, SPM4 and HP claim that there is no common approach to procurement development, expressing their scepticism toward CM and commissioning strategy. Four out of six WLAs selected have already established an ambitious programme to develop and innovate their procurement activities through the implementation of a CM approach taking a more holistic approach to procurement. Only two of the WLAs blend in with commission activities in terms of decision-making based on the information gathered. Regardless of their procurement approach, they all acknowledged that a complex and uncertain environment required the development and deployment of strong procurement capabilities. The development and implementation of such a strategic approach designed to improve procurement capabilities and enable procurement to generate value within the organisation is part of their agenda. Although, they support the view that goods and services bought regularly, with significant aggregate value, are often appropriate to develop a collaborative procurement approach. This is the process that brings together procurement professionals, buying organisations, suppliers, industry bodies, and users who are engaged in the procurement of a particular category of commodity expenditure. Collaborative procurement is one part of the change that requires the development of a new approach to service delivery and a changing structure and within a procurement model.

It is necessary to apply a structured approach to analyse and review spend in that category, and to identify and implement the most appropriate and effective approach to sourcing, supplier selection and contracting, and contract management. The resulting strategy is likely to include the development of strong market and supplier knowledge, a deep understanding of specifications and demand, a strong focus on competition and a drive for continuous improvement – all of which aim to lead to improving VFM. However, findings indicate that a key barrier for amalgamating the approach across the WLAs is a lack of capabilities, skills and
expertise particularly in the case for small-centralised procurement teams that have no capability to cover all the activities involved. In this context, both participants SPM3 and SPM4 representing small teams shared the same view, however, SPM3 claimed:

“...we are relative by a very small procurement team but the procurement team will only provide guidance, develop processes and a standardised approach to procurement. However, much procurement activity e.g. contract management will be carried out by departments, some of whom have considerable experience...We will need to find ways of building the necessary capability and capacity.”

This indicates that WLAs are continually seeking for a new approach to building stable patterns of collaborative procurement activities through which they systematically generate and modify their operating routines in pursuit of effectiveness. They go as far as to change their behaviour/organisational culture and leadership to renew and recreate procurement resources and capabilities, and most importantly, upgrade and reconstruct core capabilities in response to the changing environment to attain and sustain their performance. The rewards are twofold: building effective procurement processes accompanied by the skills and expertise needed to perform these processes.

However, a key argument here and echoed in several government reports was that commissioning on its own is insufficient; it is only one half of the picture. Commissioning is focused on important, value-based objectives about outcomes that commissioners would like to see. However, this can mean that commissioning is driven by short-term and fashionable policy trends without any reference to the capacity of suppliers to deliver. Fundamentally, commissioners are reliant on providers with the capacity and capabilities to deliver their objectives. It follows, therefore, that without effective supply, commissioners’ objectives will remain unrealised. Yet, there is no strategic sector-wide strategy for influencing and shaping supply side markets in local government, and it is an area in which local authorities need to inject further invest.

The above indicates that WLAs are increasingly using CM as a vehicle to deliver savings’. Case study 1 and 2 demonstrates the challenges and the benefits of fully implementing a strategic approach. However, CM is not the only approach that determines success i.e. CCC3 has been recognised for its innovative approach despite the fact that they use successfully
‘Directorates’ instead to identify key spending areas. MCC also has been recognised for its innovative procurement using strategic sourcing as a procurement approach. Whereas, NCC uses partial CM due to the lack of capabilities to fully implement it yet still manage to deliver the service and achieve considerable savings. This suggests that there is no consistent approach to public procurement. The Welsh Government have set their own procurement strategy and plans and also established the procurement route planer with the intention to build a unified approach across Wales. This means that the framework is available but LAs are inclined to establish their own ways determine by their resource and capability base. This was echoed by DNPS and HCM.

**Case Study 1: Cardiff Council: Category Management drives procurement transformation**


The council is continuing to face a significant budget challenges. Despite delivering savings of £200 million over the past 10 years the council is facing a budget gap of £25million during 2017/18 and a potential shortfall of £81million over the next three years.

In the UK, Cardiff Council is the unitary authority for the city and county of Cardiff, home to around three hundred and fifty thousand people (Cardiff Council Procurement Strategy 2017-2020). The Authority spends £390 million each year on bought-in goods, services and works from over 8,000 suppliers and contractors. Their spending is divided into nine categories which the main budget divides into three main categories: Environment (Highway, Waste and Parks £45.6m; Constructing Special Projects £34.7m and Building and Maintenance 41.7m); Social (Adult Social Care £107.2m; Children’s Social Care £36.5m); and Corporate (Transport £28.2m; Professional Service £40.1m; Facilities Management £22.1m and Corporate and ICT £34.7m). The Council has a responsibility to manage public money with probity, to ensure that value for money is achieved and to manage it in such a way as to support wider Council objectives.

Typically with many similar organisations this spend was highly fragmented, procurement was highly tactical and there was limited cooperation across the Authority and with the important players in the supply base. As part of an overarching commercial strategy, Cardiff launched a procurement transformation program (supported by the University of South Wales.
Procurement) to kick-start a wholesale change and set a hard target to deliver £18m savings over 5 years. The target, and indeed the entire program, was the results of an extensive spend analysis and review of supplier performance.

CM was selected as the vehicle to achieve this target and so Cardiff set about implementing the approach and a five-year program was launched in 2010. The starting point was a restructuring of the tactical procurement function. A new category centric organisation structure designed around the 44 market facing categories was put in place. These were aligned under the three umbrella categories of social care, construction and buildings maintenance and corporate, transport and ICT. A new CM process and toolkit was created and Cardiff then attempted to build capability through training and the recruitment of experienced practitioners. Initially process application was kept as simple as possible, empowering teams to develop the most effective route through the methodology but building more structure later on. Category teams worked up category plans and a program and project management approach were initiated to look after all projects. As teams began to apply the new tools and techniques cross-functional working emerged. Teams had to follow a strict rule to present findings, conclusions and recommendations using only PowerPoint to ensure clarity and focus and meaningful outputs began to appear.

Governance built steadily and the Council’s leadership team worked to drive in a new culture built around sharing good practice, compliance and challenge. The executive sponsor received quarterly reports from the Category teams to monitor performance against targets. So far this might read like any other good CM implementation where you put certain things in place and results emerge. However, it was not quite that straight forward. Once the program was up and running savings delivery was initially lacking. This was due in part to difficulties recruiting individuals of the right calibre; however, there was one other key factor and that was that outside of procurement namely the wider business had not yet begun to own the initiative. In fact, the transformation program only really got going once the different authority directorates made a real commitment to supporting the achievement of savings targets by adopting formal senior sponsor roles and including the projected savings from the CM initiatives within their forward budgets, creating the compelling need to ensure they were delivered. Five years on and Cardiff has not only exceeded the savings targets it set out to achieve, but also achieved a much deeper transformation of procurement. Procurement is now viewed as a strategic function
with the buy in and support from across the Council directorates who are now looking to a new wave of projects to support the on-going pressure to delivery budget reductions.

Fitness check conducted by KPMG (2014) rated Cardiff procurement as ‘developing to advance’, with leadership and strategy scoring highly. The work at Cardiff featured a number of steps and activities that contributed to overall CM program success. These were:

1. Use of detailed analysis and hard data to determine program priorities and targets
2. Creation of a branded transformation program build around category management
3. Restructuring procurement around categories
4. Developing capability in category management
5. Installing strong project / program management
6. Driving change through cross functional working
7. Embedding strong governance and reporting arrangements
8. Building ownership by the business for program outcomes.
9. Securing senior management buy-in

KPMG (2014) further states that in reviewing lessons learnt from the program, the executive team at Cardiff was clear that category management is about driving a wholesale change in procurement but this was only successful when the wider organisation could change together with it. Senior management buy-in was crucial and a lot of success depended upon education and training as well as striking the right balance between tactical and strategic work, after all while the big procurement project is rolling along there is still the day job. Finally, Cardiff identified that the most important success factor was getting people to trust and have faith that the program would work and was worthwhile.

On the basis of the above, it is depicted that the key to success is the ability of LAs to build or access higher-level procurement capabilities enabling them to respond to the environment dynamics by enhancing overall performance. The primary data so far indicates that all participants acknowledge the impact of highly technical competencies, transformational leadership, interpersonal skills, continues staff development, and the ability to design the recruitment strategy that attracts top talents. Although, for small LAs i.e. NCC and MCC it is particularly financially challenging due to budget restrictions and decision made by the Council to reduce the procurement team as an approach to generating savings (SPM3 & SPM4). However, small procurement teams are continually seeking opportunities to collaborate on
procurement activities at the widest possible level, internally and externally. i.e. CCC2 and Pembrokeshire created a shared service using collaborative procurement as a strategic tool - as an opportunity to learn from each other - Pembrokeshire is seen as more advanced in CM implementation than CCC2 but on the other hand CCC2 claim to be more advanced in community benefits (See case study 2). This indicates that small WLAs are inclined to build proactive exchange knowledge capabilities that enable them to enhance benefits of economic, social, cultural and environmental aspects - in line with the encouragement by Welsh Government to collaborate.

It appears that the organisational culture and leadership are also key factors that influences the ability of the organisation to develop, deploy and most importantly to use higher –level capabilities in strategic conversion.

**Case Study 2: Carmarthenshire County Council: Expanding Capability to Meet Local Demand: Collaborative Procurement. Source: KPMG (2014) and Carmarthenshire County Council Official Website.**

The LA is currently facing a period of significant and continued budget reduction and it is seen as more important than ever to ensure they are making the best use of their resources. In September 2016 the Audit Committee approved the Revised Contract Procedure Rules, which reflect changes in the Public Contract Regulations 2015 and strengthen internal procedures and processes. The E-Tender Wales Bravo Solution Software for Contract and Tender Registers is being used to support the Authority’s E-Tendering and this now supports the Council’s Contract Register. A sustainable Risk Assessment is carried out for tenders over the value of £25k, which has been added as a requirement in their revised Contract Procedures Rules. The assessment ensures that environmental, social and economic issues are addressed in all key procurements. Further progress has been made with Pre-Market Engagement. The procedures have been adapted to the Mechanical and Electrical Service Contract, which was a £38m contract with opportunities for many local suppliers to be involved. The Council is working to improve areas highlighted by the Procurement Fitness Check (KPMG, 2013) utilising procurement expertise within departments. This required increased capability of the Corporate Procurement Unit (CPU) and appropriate spend analysis tools which have been planned for 2017/18. Although, the Council is currently using PROACTIS a new technology that supports
collaborative procurement, sharing of best practice, managing contracts, supplier directories and sourcing evaluation.

The Council has a relatively small central procurement unit (CPU) (headcount of 6 fulltime employees, 1 officer working four days a week and up until recently they had 1 temporary European officer, although, this is no longer vacant made up of a contracting unit and an enabling and innovation unit, procurement activity is devolved to departments. The CPU is experienced in the technical aspects of tendering and compliance. However, up until recently there was no central contract register to ensure the Authority is compliant with financial regulations, the activity tended to be reactive with departments often seeking expertise at short notice, hindering its ability to create internal capacity for example the development of tools to delegate some procurement activity. Although the plan’s ambition for CPU to develop and innovate its procurement activities was challenging due to movement to a CM approach and utilisation of procurement expertise within departments that was limited by the capacity of the central team. The Authority has a requirement to make savings and identify efficiencies through procurement but the interview revealed it felt the need to ensure that procurement is higher on the leadership strategic agenda and the culture embedded in the culture of the LA to the maximise the use of procurement resources available.

The Council has managed a regional approach for procurement and delivery of various regional frameworks since 2008 on behalf of Pembrokeshire County Council, City and County of Swansea, Neath Port Talbot County Borough Council and other named participants. Various options were considered following the expiry of the last South West Wales Regional Contractors Framework in August 2015. In response to various collaborative initiatives promoted by the Welsh Government and others to encourage local delivery through the use of frameworks, the South West Wales Regional Group has been expanded to include Ceredigion County Council, as well as 25 other regional organisations who expressed their interest as named participants. At the heart of this regional approach is the further integration of the supply chain generally and to expand the development of the local construction market, supply chain and skills through appointed contractors, encouraging further extended training of existing employees and future generations through shared apprenticeship schemes etc., by full engagement with local training groups such as CYFLE. This was identified as not possible under the traditional approach of adversarial tendering and protracted procurement.
However, in June 2016 in response to these challenges the procurement team emerged with Pembrokeshire CC with the intention to achieve synergy, drawing on each other’s set of strengths i.e. Pembrokeshire is more advanced in CM than Carmarthenshire therefore they can learn from that experience. On the other hand Carmarthenshire is more advanced in community benefit therefore Pembrokeshire could learn from their experience too.

Case study 2 demonstrates the impact of introducing a shared services model and engaging in collaborative procurement strategy (see case study 1, 2 and 3) indicating that the trend in public sector procurement practice is to centralise procurement activities and drive standardisation. Considering the austerity agenda the outcome of the approach enables LAs to potentially deliver considerable financial savings, improve working practice and allowed the realisation of cashable savings that have provided much needed financial resources for enhancing the efficiency and effectiveness of public service. The most importantly four participant member of the Carmarthenshire and Pembrokeshire procurement team: ARM; SPM1; CMO and SPM2 highlighted five benefits of creating a new procurement model: (1) shared knowledge and expertise; (2) accelerate learning; (3) creates team satisfaction; (5) improve project team relationship; and (6) develop trust.

4.2 Theme Two: Dynamic Capabilities: Clusters of Activities in WLAs

4.2.1 Sensing

The above indicates that the paradigm of public sector procurement is changing recognising that procurement could be seen as strategic tool in delivering WG policies whilst working within difficult resource and capacity constraints. As a result under such circumstances WLAs need to put more emphasis to better understanding of business needs and the market, to pre-tender market engagement, to ensure that pre-qualification requirements are proportional to the contract, to encourage collaborative bidding, to explore supply chain opportunities, to contract and supplier relationship management. The wide scope of these activities makes their environment too complex and challenge their ability to cope. As a result, the development of analytical systems and strategic use of individual capabilities are vital in enabling WLAs to discover or sense opportunities for innovation and social benefits and to manage risk better through smarter engagement with the market.
The evidence shows that WLAs are seeking better systems to turn their heterogeneous source data into tangible opportunities cooperating with leading enterprises’ spend analysis systems. Opportunity creation and/or discovery requires both access to information and the ability to recognise, sense and shape developments. However, this depends on aspects of the individuals’ capabilities and extant knowledge particularly on user needs in relation to existing as well as innovative solutions. One of the respondent claims, “...sensing is all about identifying our needs, what our opportunities could be and how we could change and find innovative solutions” (HP).

Although, three respondents noted: “The lack of awareness of the opportunities that exist in innovation for LAs is evident” (HCP, SPM3, SPM4). Furthermore, SPM3 stated:

“Many of our suppliers felt that it is difficult to penetrate the public sector with innovative solutions and that there were missed opportunities for giving clear signals to the market. Better engagement with suppliers including third sector and social enterprises could be recognised as innovative, allowing more benefits to be realized.”

This indicates that government in cooperation with LAs needs to develop processes to tap supplier and innovation encouraging flexibility and adaptability in public procurement. All respondent indicated some degree of nervousness when asked for new innovative approaches indicating that they want to innovate but they don’t want to be an innovator. Participant SPM3 echoed this

“...on the strategic perspective we are inclined to stop being repetitive – doing what we always done-instead we need to look forward, although, this has become quite a battle with a lot of service areas.”

The participant went on to emphasis

“...this battle is constantly there since they don’t like change becoming an obstacle to becoming innovative – so the team try to work with other service areas to identify new opportunities.”
Nonetheless, another participants (LPS) stated that

“...in terms of sensing opportunities cultural change in both levels of service and procurement is required to enable more intelligent systems and encourage change at all levels, embracing innovation as it necessitates response to the dynamic environment.”

The impact of the cultural change is illustrated in Case Study 3.

**Case Study 3: Caerphilly County Borough Council: Changing Organisational Culture Strengthening Procurement Compliance and Governance.**

The Council had the benefit of a culture that is very open to opportunities to take a lead in applying best practice. The role of the Head of Procurement is evident. In 2016, the Council began participating in the E-Trading Wales programme, taking advantage of central funding from Value Wales to secure supplier enablement and change management resources, delivered by Basware.

The council has a mature central procurement team. The size of the procurement team is 16. The team comprises 12 fully qualified procurement experts, 2 SME development officers and 2 administrators. The team is structured into three areas: Procurement, Supplier Relationship, and Administration. Through the successful application of ICT they have taken a traditional based function and transformed into a lean, focus driven technology based strategic enabling body. The team focus is in social and economic regeneration applying the use of the Welsh Government’s best practice tools and procurement policy whenever applicable. The team has participated in a number of Strategic Welsh Reviews demonstrating their engagement and commitment to collaboration.

The team were praised highly for their procurement achievement by winning the Outstanding Contribution Award at the Welsh National Procurement Awards 2015. The Council’s procurement team has challenged every aspect of how it does business, delivering change through innovation and ‘best practice’ in application of ICT, organisation structure and staff training. The Head of Procurement stated that
The biggest challenge has been managing the changing culture mind-set internally. Not everybody wants to move towards a more IT-integrated approach and not everybody wants to have a leaner supply chain, so it’s about educating our internal customer base to help them recognise the benefits involved.”

The best practice demonstrated by “Team Caerphilly” could be filtered into any procurement organisation to help ‘raise the bar’ and elevate procurement from the back office to the top table for decision making.

However, due to the austerity agenda the procurement team will be reduced by 2 next years because of the saving target they have to meet (20% savings out of the budget). Despite the budget and resource reduction they will continue to fine the balancing act to make sure that they use what they have got to the best advantage. The key procurement priorities will continue to be economic development and support to local business, as well as maximising value for money in procurement and commissioning activities.

Another aspect acknowledged by participants is innovation. All participants recognised the significance of innovation especially in the current climate, however, they defined a lack of unambiguous information and training, confused messaging and lack of tools showing how to put an innovative procurement approach into practice as barriers. As procurement cannot be undertaken effectively unless procurement activities in the round are carried out professionally and effectively, people whose procurement skills have been developed appropriately should carry out all procurement (See Case Study 1). This includes full-time procurement people; people who do procurement as a significant element of their work; and people who procure only occasionally who are currently untrained but often senior. In a field as complex as public procurement it is vital that LAs have clarity on priorities. In an environment of limited resources those responsible for spending taxpayers’ money need to be given a clear indication of where to focus their efforts first.

However, during the interview process participants (HCP, HP, SPM4, and LPS) expressed their concerns in regards to the current experience of losing experienced procurement staff who would take away their procurement knowledge and expertise leaving a hole behind—they will not be replaced as a result of the austerity agenda. Five participants (LPS, SPM1, HCM, HCP and CM) indicated that procurement teams are juggling ever increasing pressures and
expectations from both their own organisation and national policy makers, to not only deliver efficiency savings, but to deliver a wider range of policy objectives including community benefits/social value, as well as ensuring compliance with EU procurement directives. This means that they are hunting for a new strategic approach that strengthens the capability and capacity to respond to these pressures and deliver VFM. This required leadership capabilities creating a new corporate procurement team that has the ability to successfully implement their procurement strategy across the whole organisations’ third party spend, including traditionally hard to reach areas such as social care. This also enhances the ability of the organization to shape, and calibrate to opportunities through effective and adaptable processes, systems, and procedures. This has been echoed in several reports, such as the McClelland Report (2012) the Fitness Check Report (2014) and the Williams Report (2014).

4.2.1.1 Scanning the environment:

4.2.1.1.1 Environment analysis:

Findings indicate that analytical tools such PESTLE, SWOT, or Porter’s (1998) Five Forces that enable an analysis of broad internal and external environmental factors that potentially impact to a greater or lesser extent on public procurement are not used to the extent of providing micro and macro-environmental analytical data. Only three out of eleven participants (HCP, DNPS, and HCM) made some links to these tools which are mainly used by private sector organisations, but they did not elaborate further on it, instead they claimed:

“…despite the analytical tools we use to sense the environment in a procurement context it is essential that to some extent LAs conduct the in environment analysis focusing on four factors: First, understanding legislation and policy environment. Second, assessment of population needs. Third, analysis of key suppliers, and fourth, analysis of resource availability.”

Other participant added to the above claiming:

“…procurement has moved on in term of analysis widening the scope of analysis to the whole supply chain and contextual factors to inform decision-making process”
HCP further explained “environment analysis also help us to identify, assess, and mitigate procurement risk...” The participants also highlighted the importance of the development and deployment of risk management capabilities. ARM, SPM1, CMO, and SPM2 supported the view since risk management has become one of their priorities. They identified four areas that require risk management capacities; (1) failure to sufficient adoption and make use of available e-procurement tools to minimise complexity, cost, timescales and requirements for suppliers complying with the Wales Procurement Policy; (2) given the austerity agenda, failure to identify resources to be able to meet the demand; (3) failure to fully address the adoption of a Category Management as per Welsh Government Procurement Fitness Check Report (2014) and (4) failure to provide sufficient support to procurement staff in light of increasing challenges to procurement processes. However, due to the lack of risk management capabilities slow progress have been made up to date.

Risk mitigation required comprehensive analysis. But this is not the only area of the public sector procurement that required such analysis. i.e. areas such supply chain, supplier and market, spend analysis and process analysis are focus of analysis. This indicates that the procurement analysis capabilities are essential on the process of sensing environment – gather and evaluate information on the market, business needs, categories, key suppliers, supply chain management and contextual factors to inform procurement strategy. However, may there not be scope for all LAs since participants representing small procurement teams seems to be focus only in spend analysis and supplier engagement as two main analytical areas used as a main source of evidence that determine their procurement strategy or/and strategic decision-making. This indicates that small LAs may also lack the depth of capabilities, particularly analytical and management capabilities, to sense effectively the environment and use the outcome in strategic conversion. Nonetheless, it appears that for all respondent that the understanding of the context in which the WLAs are operating is essential in developing procurement strategy that is fit for purpose. If procurement professionals are to influence their strategic approach they need to be prepared. They need to understand the impact that the supply chain has and the levers they have at their disposal to improve performance and mitigate risk in the entire supply chain. Standard business tools could be seen as a starting point to develop the procurement strategy. Furthermore, participants suggested that data provided by supply chain and spend analysis tools determine their procurement strategy.
4.2.1.1.2 Supply chain analysis

To develop a robust procurement strategy, it is necessary to have a good understanding of the supply chain and to have performance indicators that allow WLAs to evaluate and track changes in performance. This required extensive research to identify the organisations competitive position, its strengths and weakness and its relationships with the supply chain. The engagement with potential suppliers and with other stakeholders is vital since most of the innovative ideas come from them. Building an effective approach that enables the organisation to better understand their relationship with suppliers and also enhance customer knowledge, including institutionalising feedback loops and creating organisational roles, systems, and processes that continuously capture and relay customer demands. HP stated: “We have got end-to-end e-procurement so we have total vision of our supply chain and spend per category”. This indicates the wide scope of procurement activities and extensive use of technology and engagement in shaping organisational strategy transforming the organisation and leading supply chain development in the search for sustainable competitive advantage.

CCC1 are working to establish an end-to-end approach building a streamlined, efficient, technology led end to end process that would allow the realisation of business efficiencies across the Council. A participant (HCP) claims:

“Once the Council had made a decision to move away from a large framework approach, developing a model based on the principles of a dynamic purchasing system was relatively straightforward – our concern was how we could deliver it. Adam HTT Limited and their SProc.Net solution gave us a platform to deliver our preferred model – allowing us to effectively manage a diverse supply base with a continuous focus on quality.”

Findings suggest that WLAs recognise the importance of supply chain design with an intention to identify sourcing opportunities and the enhancement of supplier engagement. In this context the decision-making process can have a substantial impact on the strategic approach. Procurement professionals should become increasingly involved, and where possible lead, the development of supply chain management. Four participants (SPM1, SPM3, SPM4, and LPS) suggested that small LAs would restructure to involve more people in the on supply chain with an intention to lead the supply chain but they are currently facing resource and capability
restriction due to government pressure to increase savings. This indicates that not all WLAs have the skills necessary to manage even the upstream part of their supply chains since it can be complex networks of complex supply chains, notwithstanding the supply chains within and downstream from the organisation. It appears that all participants are aware of the role of the supply chain managers in the management of total cost since they are able to see and influence the whole cost base across the business. Supply chain management is responsible for bringing a product to market utilising all the resources, both internal and external, available and aligning this activity directly with the LAs strategies and objectives

4.2.1.1.3 Supplier - market analysis

In a procurement context supplier engagement activities enable LAs to understand what their supply chain looks like. All participants recognised that supplier engagement activities are vital to gain knowledge of the marketplace that influences the way in which they structure procurement. Participants SPM1, CMO and SPM2 claimed:

“Very often we hold a supplier event which we call a ‘market shaping event’. We hold these events prior to the tendering process to gain knowledge and ideas of how to structure procurement. This activity would be followed by a capability assessment, to assess and gauge the level of interest, especially from SMEs. ”

Another participant (CMO) sheds light on their approach to supplier engagement activity as a way of enhancing their supplier base and market knowledge. The participant further explained:

“...we split suppliers and delegates into workshops to discuss the requirement, the proposed specification that we had on three lots in order to learn from them. Based on the information gathered we will then discuss how we are going to evaluate? How we are going out to the market?”

This indicates that building effective supplier and market analytical tools and engaging in activities that bring them closer to the supplier based enable them to gain better intelligence of market structure and supplier strategies as well as identifying potential risks and opportunities. Findings suggest that the supplier relationship is one of the most important strategic procurement activities which depends on the strategic sourcing process. This means that
benefits of supplier relationship can only be seen if the LAs are willing to foster close relationships with strategic business partners, as well as promote full and open communication so as to realise mutual gains in the long term. As one of the participants (HCP) stated:

“The idea that strategic procurement will focus on supplier relationship management is hinged on the business understanding that I described, the procurement function can create and, in some cases, is creating a profound impact on financial performance. Procurement teams, having aligned successfully with their key suppliers under my supervision, have shown improved supplier capabilities in quality, innovation, reliability, cost reductions, and responsiveness in reducing risk factors. Dynamically reconfiguring the supply base of a business will allow greater value to be unlocked through understanding of the supplier capabilities and agility.”

Besides the above, another participant (HP) acknowledged:

“Transferring attention to implementing an effective supplier relationship program cannot only deliver significant savings, but even more significant opportunities. The purchasing portfolio approach including matrix classifies a firm’s purchasing items into four categories on the bases of profit impact and supply risk. This matrix can be used to adopt the dynamic capabilities embedded in procurement processes...In theory all is good but when it comes to the practice it is a different story...we do not have enough resources to enables us to build or buy the higher level of procurement capabilities necessary to build and manage long-term supplier relationships.”

It is apparent from the above responses that supplier relationship management in the procurement part of supply chain management has more scope and importance. All participants acknowledge that supplier relationship management capabilities are essential since establish constructive and innovative strategic relationships based on driving value through appropriate long term relationship. Furthermore, useful tools can be used to enhance the allocation of scarce resources in the procurement structure and its processes.
Likewise, a portfolio approach can bring the difference between an ineffective, unfocused purchasing organisation and an effective, and focused one. This especially for LAs that have never thought systematically regarding the expenditures of their procurement processes, the portfolio model will be of enormous advantage. Consequently, the utilization of this purchasing methodology is responsible to lift the purchasing activity out of the tactical, fire-fighting mode into a strategic role. Potential advantage of the supplier relationship and portfolio model could convince top management of the effective role that purchasing could play in contributing to LAs cost reduction and success.

In support to this a participant (LDS) echoed:

“Purchasing portfolio modelling is a powerful tool since it coordinates the sourcing patterns of fairly autonomous strategic business units within companies, resulting in leverage and synergy... it is also a useful model that could differentiate the overall purchasing strategy, with different strategies for different supplier groups.”

In contrast to the above statement, a respondent (SPM3) stated:

“With a growing acceptance and usage, purchasing portfolio models have become the target of severe criticism. As the complexity of business decisions does not allow for simple recommendations. How could one deduce strategies from a portfolio analysis that is based on just two basic dimensions? By simplifying the issue of buyer–supplier relationships, portfolio models fail to capture vital aspects, such as the context of networks, the interdependencies between products, and the concern for sustainable competitive advantage through internal relationships...above all this it requires a specific expertise which we clearly lack... how are we supposed to do all of this with the devolved procurement and small central team that comprises only 2 members of staff, therefore we are focused on our local suppliers who we know very well and we don’t need to use such a complex framework.”

Likewise, another respondent (SPM1) claims:
“This approach is a counterproductive, providing recommendations either to exploit power, or to avoid risk associated with the supplier exercising power. From a completely different perspective I condemn the purchasing portfolio approach. Its major weakness that I perceive is that the methodology does not provide us with any proactive thinking about what can or should be done to change the existing reality of power.”

On the basis of the above, a concern about the portfolio model for supplier relationship management is raised. On one side, the respondents appreciate the model, whereas, on the other side, the interviewees have rejected the functionality of this model. In addition, measurement issues have been highlighted as a key criticism of portfolio models. In general, decisions based on portfolio models are proven to be sensitive to the choice of dimensions, factors and weights. How is one to know whether or not the most appropriate variables are being used? Hence, it can be stated that this model is not workable for all LAs, since it does not provide accurate forecasting related to the choice of suppliers for the procurement purpose. In this context a participant (HP) clarified:

“...there is always an element of market analysis in every procurement that we undertake to see what the market is like, particularly in social care when it is retendering since the market in this particular area is volatile so it is necessary to look at the changes and how they are working.”

This indicates that for some LAs the capability to carry out market analysis as an activity on a regular basis is limited therefore such activity takes place only sporadically when special circumstances emerge. The above again indicates that there is no unified approach towards supply and market analysis among WLAs. However, there is a general agreement among the participants that they are operating in a very dynamic and complex environment and to get through the fog of uncertainty they need to get insight involving gathering and filtering technological, market, and competitive information from both inside and outside the organisation making sense of it and working out the implications for action. This requires management capabilities to utilise resources effectively and to develop and deploy procurement capabilities such as analytical capabilities and supplier engagement capabilities enabling them to enhance their understanding of the suppliers’ requirements and market needs building a fit for purpose strategy that enables them to seize these opportunities.
Whilst everybody will agree that capability is vital for successful procurement, the reality is that money is tight as we know in the public sector, and budgets for training and development are amongst the first to be cut when times are tough. There has also been a reduction in many LAs in the number of people carrying out public procurement, which can put more pressure on them and again does not help in terms of time for training activities. The reduction in numbers also means many procurement functions are not being “refreshed” with younger people coming into procurement teams, which questions the ability of the organisation to effectively carry out and continue to innovate their approach to procurement processes. Nonetheless, these are not just issues for the procurement profession and professionals. As stated above, LAs are being involved in commercial activities, which mean that for them to get the most out of suppliers and improve management of their expenditure effectively, many different people within the organisation need to be commercially capable. Developing greater competence and commercial understanding amongst commissioners, budget holders, and even elected representatives in some cases, is also vital. This indicates that a procurement team needs to understand the context, in which it operates, and identify the levers at its disposal to influence organisational performance. Sensing opportunities and threats can also be facilitated by employing effective spend analysis, as this can help highlight what is important or, indeed, explore new areas.

4.2.1.1.4 Spend analysis

In recent years, the Welsh Government has collected evidence through the Collaborative Spend Analysis project to provide an overview of public procurement expenditure to inform policy - making decision (Wales Audit Office, 2017). This is in line with the primary data indicating that WLAs acknowledge the importance of building an advanced spend analytical tool to inform strategic decisions, improving efficiency and strengthen cash flow across entire the local authority. However, nine out of eleven participants (HCP, ARM, SPM1, CMO, SPM2, SPM3, HP, SPM4, and LPS) claimed:

“the public sector procurement analysis landscape is fragmented with no overall collaboration. LAs often lack a consolidated view in their spending because procurement responsibilities are spread across many departments, and there is no unifying processes.”
This means that control of budgets may reside across multiple layers of the authority, so there is little centralised oversight. This make it very difficult for LAs to know what they are spending or how many suppliers they are managing. This lack of transparency also makes it difficult for authorities, even sometimes for the procurement department, to align strategic priorities and targets. This also makes difficult to establish central performance contract management system to track overall spending, employee performance, and quality of goods and services.

All participants highlighted that public procurement spend is a powerful tool for advancing various political objectives, leading to a situation where capturing savings may be traded off for other goals. i.e. The Conservative Party are the largest political party on PCC, which means that councillors have a power to make a decision where public money should be spent. Similarly, the Labour Party is the largest political party on CCC1 which means that labour councillors determine where public money should be spent.

Despite such complexity and political pressures authorities are seeking new innovative, easy to use tools that are capable of providing frequent accurate data, and moving away from systems such as Spikes Cavell which allowed LAs to upload their spend data quarterly. One participant (HP) claimed:

“Given the complexity and breadth of organisational spend – which comes from being a large, forward-thinking local authority – we were looking to evolve further with an easy-to-use solution which provides clear visibility of our spend, enabling us to effectively monitor and report against our key performance indicators (KPIs).”

Several tools are available for the WLAs i.e. ARTEMIS is a leading provider of contract lifecycle management (CLM) and a spend analysis tool, which is much faster and more flexible than Spikes Cavell and turns any heterogeneous source data into tangible opportunities and adds more business value. This is a tool currently used by CCC2. SPM1 and ARM claimed:

“We used to use Spike Cavell to look up the actual spend across the organisation; however, we are using ARTEMIS as a more advanced tool within the financial
system as adjusted making the analysis easier and it gives us that spend with the top suppliers."

This means that by interrogating the system they get all the information needed which they can classify by product categories or by spend with various suppliers.

ORACLE is a tool that helps organisations to optimise their supply side performance by integrating data from the enterprise value chain, thereby enabling executives, managers, and frontline employees to make more informed and actionable decisions. WLAs using ORACLE procurement and spend analytics from increased visibility into corporate spend as well as complete procure-to-pay process, with comprehensive analysis of procurement performance, supplier performance, supplier payable trends and employee expenses. Through complete end-to-end insights into the spend patterns and visibility across the procurement process, LAs can definitely reduce costs, improve efficiency, increase customer satisfaction, and enhance overall performance. SPM4 claimed:

"...we are still using ORACLE reporting in terms of looking at our spend and category management looking back on the spend over a number of years and to plan for the future."

Another participant further elaborated:

"One of the things that we’d like to do but resources are an issue ... is about looking at the spend on non-contract activity so where we’re kind of seeing lots of spend going through in areas that we haven’t got contracts for and then bringing that together to see whether it’s worthwhile looking at an opportunity to actually have a contract in place." (SPM3)

PROACTIS is another leading spend control and e-procurement solutions tool. It also provides support for collaborative procurement – sharing best practice, contract and supplier directories and sourcing evaluation. This means that these tools provide insights into risk, supplier diversity, P2P process; contracts & compliance, benchmarking and multi-organisation purchasing collaboration, spot cost savings opportunities and process efficiency improvement.
HCP stated

“Continuing our long working relationship with PROACTIS, which already assists us in driving internal efficiencies and effectiveness, while also helping us to meet regulatory requirements, there were clear advantages to implementing the next step of the journey with the PROACTIS Spend Analysis solution and I look forward to the team reaping the benefits.”

PROACTIS has become very powerful tool widely used by WLAs. The spend control and e-procurement solution provider PROACTIS claims that 20 out of 22 WLAs (See Appendix; Table 1) are currently using the analytical tool to enable the delivery of spend analysis providing rapid monitoring of spend performance against key performance indicators (KPIs), as well as driving further improvements within the procurement function (www.proactis.com).

Table 32 indicates that WLAs are embracing innovative technology to maximize their performance – CCC3 has continued its expansion of PROACTIS solutions, and the strategic relationship between two organisations. A participant echoed: “...we have recently invested in technology moving from Spikes Cavell to PROACTIS since it is more effective analytical tool that provides daily analysis instead of quartile”(HP).

<table>
<thead>
<tr>
<th>WLAs</th>
<th>Current Analytical System</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC1</td>
<td>PROACTIS</td>
</tr>
<tr>
<td>CCC2</td>
<td>Moved from Spikes Cavell &amp; Artemis to PROACTIS</td>
</tr>
<tr>
<td>CCC3</td>
<td>Moved from Spikes Cavell to PROACTIS</td>
</tr>
<tr>
<td>MCC</td>
<td>PROACTIS</td>
</tr>
<tr>
<td>NCC</td>
<td>PROACTIS but they also use ATAMIS spend analysis &amp; ORACLE Financial System</td>
</tr>
<tr>
<td>PCC</td>
<td>PROACTIS</td>
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</tbody>
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The statement made by Dabswell (2017) the marketing director of PROACTIS support the above view. He stated:

“Local Authorities are responding and accelerating their investments in Spend Control and eProcurement solutions in conjunction with the XchangeWales hub because they see a tremendous return from those investments.”(www.proactis.com).
This was echoed by HCP who claimed:

“PROACTIS automates our sourcing events to complex multi-stage negotiations and enables us to realise best value, not just the best price, from our local supply base by factoring cost, risk, and performance drivers into decision-making. We have achieved a balance between making it easy for users to consistently adhere to the procurement policy and allowing flexibility to handle any complex project or service-user requirements.” (HCP)

This indicates that technology is transforming procurement, equipping LAs and procurement professionals with the tools that support collaboration, share best practice, improve contract management, sourcing evaluation. Attributes of PROACTIS are shown in Figure 18.

![Figure 18: PROACTIS Spend Control and E-Procurement Solution: Source: Author](image)

However, the ability of WLAs to adapt and embrace new, faster ways of working, and overcome current challenges may also lies in a set of capabilities. i.e. **Knowledge and information management capabilities, cross-functional collaboration capabilities, talent management capabilities and performance management capability.** However, all participants suggested that

“Basic performance in public procurement remains challenging...we are way behind the private-sector procurement in several performance dimensions, including efficiency of procurement tools and processes, capabilities and performance management...this may be because public sector environment is way more complex than private sector environment and also due to restriction of
financial resources and expertise, but we could learn from the private sector procurement”

This is on the same lines as the results of the McKinsey survey of procurement practice in more than 300 organisations in a wide range of industries suggesting that public-procurement needs to step up and learn from private-sector procurement in term of procurement tools and processes, capabilities, and performance management (cited by Husted and Reinecke, 2009). This indicates that nearly ten years later nothing has been changed.

Despite challenges underlined by participants, findings indicate that WLAs are actively involved in sensing opportunities seeking to capture new technology innovation and develop an ecosystem that enable authorities to spot opportunities offering a better solution to removing deficiencies and increasing their buying power. PROCTIS News (http://www.proctis.com/About-Us/News/2012/August/20-out-of-22-Local-Authorities-in-Wales) state that WLAs recognise the benefits of using new technology strengthening their “…buying power through improved sourcing, compliance with supplier contracts, negotiations and preventing "maverick" spending.” PROACTIS New also claims that LAs have also continued to seek process savings through improvement in the efficiency of cycle times. Thus, the authorities aim to eliminate duplicative manual procedure by standardising processes and procedures.

However, the scepticism towards the use of spend analysis tool remain among senior procurement experts. i.e. HP claimed:

“…my biggest criticism of spend analysis is always looking back. It’s never looking forward…we’ve sat down with our directorates and said to them, here is a plan of what we have procured in the past and if we continue with business as usual this is what we need to go forward...So every year we sit down and we do a due diligence on our procurement plan. So we’ve got a 5-year procurement plan then, that tells us what we require for the future. The only fly in the ointment with all of that is when we get funding from Europe or Welsh Government that we didn’t expect to come.”
This was supported by other participants HCP, ARM, SPM1, CMO, SPM2, SPM3, SPM4, and LPS. However, DNPS and HCM shared different view since the Welsh Government is a main funding source. However, despite the several issues underlined by participants WLAs are continuing to meet citizens’ needs.

In summary, findings indicate that a spend analysis is an important process that enables LAs to sense opportunities informing strategies that realise savings and create value. Enhancing efficiency, effectiveness and risk reduction requires a fundamental understanding of business needs, market knowledge and mechanisms. It also requires an understanding of spend and demand, the need to drive value and seek innovative solutions, and the evolving and changing way services are delivered. With a solid and reliable base of spend data analytics, WLAs can aggregate other procurement and business performance data into an advance data analytics platform that potentially drives continuous improvement, digitisation of procurement processes and gives a prediction of demand and risk.

Individual capabilities and extant knowledge plays a vital role in the performance of these tools as a result of the organisational ability to recognise opportunities. This requires specific knowledge, creative activities and the ability to understand users. It appears that WLAs are working to modernise approaches and comply with the Wales Procurement Policy Statement (WPPS) (see appendix, p. 340) in making use of appropriate and available e-procurement tools and new technology to make access to their contracts easy and for further electronic engagement with their suppliers. Data also suggest that despite the reasonable progress made by WLAs in the adaption and use of these tools there is still a need for further improvement and to explore the use of other tools and to work closely with WG and the NPS to ensure that they are in a position to adapt the new tools under development and gain a new innovative solutions.

4.2.1.1.5 Process analysis

As stated in Chapter 2 procurement takes part in many business processes, such as requirement definition, category management, order processes, and supplier relationship management. While all of these are important, some will be particularly significant for achieving the specific strategic objectives of the WLAs and hence they need to be analysed in detail during procurement strategy formation. In this context, findings indicate that the initial
Stage in analysing processes is to create a map or diagram that evidences the current state of the procurement processes. i.e. PCC uses a data analysis process to understand spend and data and look for opportunities with some of those opportunities are perhaps contract renewal opportunities. A participant (LPS) claimed:”...we take a commissioning approach as a tool that has been devised, building on APC.” Although, DNPS and HCM clarified that the use of the tools depends on what they want to achieve with them. Different process mapping tools bring out different aspects of processes, such as customer value, activities, time, cost, resources, responsibilities, quality, inventory, risk and sustainability. However, both participants failed to mention any specific approach implemented in their organisation.

In this context CMO explained the process analysis approach stating:

“\textit{In our LA an effective analytical process and planning is carried out prior to procurement. This planning includes: consultation with stakeholders about what is needed and the budget that is available to fulfil the need engagement with the market to understand the solutions that may be available and to get feedback on how the requirement may be best met and the establishment of effective governance arrangements and resourcing plans if necessary because the department does not have the necessary expertise, appointing advisers to help ensure novel or difficult projects are established on a sound footing.}”

In relation to tendering processes findings indicate that WLAs are responsible for achieving VFM, normally through fair and open competition complying with legal obligations under EU procurement rules, and adhering to EU Treaty principles, the most important of these being equal treatment, non-discrimination, mutual recognition and proportionality transparency which are clearly described in detail in the Policy and Standards Framework. Six participants HCP, SPM1, SPM2, SPM3, SPM4, HP, and LPS claimed that the tendering process involves five stages: (1) tender documents, (2) Bid submission requirements, (3) contractor queries, (4) bids received and (5) bid evaluation. However, from the content analysis perspective, it appears that procurement projects with a value over a stipulated threshold for goods and services and in certain spend categories are fully subject to EU Procurement Directives. These procurements must be advertised and meet set timescales, from the initial notice to contract award, and defined, for example, the minimum time during which suppliers must be allowed to respond. The Directives also provides for four main procurement procedures to be used by authorities.
For straightforward procurements, for example of commodity goods and services, they may choose between open and restricted procedures. However, for complex procurements contracting authorities are normally expected to use the Competitive Dialogue procedure, which is where a contracting authority wishes to award a particularly complex contract and considers that the open or restricted procedure will not allow the award of that contract.

In support to the above participants claimed:

“The Council must comply with EU and UK Procurement regulations. The EU Procurement Directives requires all tenders / contracts with spend in excess of £174k for goods and services and £4.3m works to be subject to open competition. We are also required to provide minimum timescales for advertisements and tender submissions implementing two stages tender– Select and Award applying to both Open and Restricted Procedure.”

This indicates that under the open procedure, all interested candidates who respond to a LAs advertisement must be invited to tender. This procedure does not allow any form of pre-qualification or pre-selection. Whereas, under the restricted procedure, interested candidates are invited to respond to an LA’s advertisement by submitting an expression of interest in which they reply against defined criteria relating to their organisation’s technical capability and financial standing.

The above indicates that contract management is another process that plays a central and fundamental part in the delivery of public sector services and touches the lives of every citizen. However, contract management remains very challenging for LAs (DNPS, HCP, ARM, HP and LPS). DNPS further echoed:

“...examples of good practice and very poor practice too have been identified across WLAs...in recent years this has been recognised as a source of procurement problems and issues rather than procurement itself. Contract management is not well understood since LAs focus too much on terms and conditions of the contract document rather than including all the aspects of both value and risk.”

HP further added to this issue stating:
“It is very challenging for us and it will remain the same until we centralise procurement activities...as it stands contract management activities are spread widely across various department. The contract management activities will be carried out more effectively by the procurement professionals who really care about and are closer to the contract delivery. In term of contract management process analysis this remain challenging too.”

This was later confirmed by HCP, ARM, and LPS. They further elaborated on this issue identifying the complex skill set requirement and contract management benefits measurement issues. In this context DNPS stated “we are ready to provide our assistance to WLAs if required since we have the skill set and expertise required”. Whereas, HCP stated:

“Contract management is not well understood by WLAs, therefore, it is difficult for us to understand what processes and skill set is required. However, we have recognised the impacts that the contract management could have on cost reduction and risk management therefore we have started to develop the technical skills dealing with technical aspects such as understanding the detail of supplier performance in the case of complex contracts, as well as more generic technical skills such as negotiation and project management.”

However, HP highlighted issues in term of measuring the benefits of contract management stating:

“...it is difficult to identify and measure the tangible benefits of contract management. If the supplier delivers the contract as agreed, everything works as planned, risk are avoid and managed...so what is a point to put so much effort in something that is not needed?”

This means that yet again there is a diveres view in terms of the contract management skill set required and processes among the leaders of the selected LAs. However, there is a clear evidence showing that this has attracted much more attention now than in the past. This is particularly evident in LAs where the procurement maturity stage is advanced. i.e. CCC1 has already started to build capabilities needed to manage contracts effectively since they recognise
that the risk is higher in current uncertain environment. Furthermore, a new procurement model has emerged for CCC2 creating a new procurement model by merging with the Pembrokeshire with intention to take procurement to a strategic level accessing the skills and expertise required and also strengthen procurement processes.

Despite the issues underlined by participants the Office of Government Commerce Report (n.d, p. 13; 14) identify three contract management activities grouped into areas:

1. *Service delivery management* – ensures that the goods or services are being delivered as agreed, to the required level of performance and quality, and are supporting the business and operational need for the contract.
2. *Relationship management* – keeps the relationship between the two parties open and constructive and aims to resolve or ease tensions and identify problems early.
3. *Contract administration & change management* – handles the formal governance of the contract and changes to the contract documents.

This enlightes some aspects of the contract management processes and activities that could be used as a guidance for LAs to enhance their understanding of the contract management spectrum. The largest suppliers, the most complex contracts and the longest contract terms, significant client/supplier relationship effort will be required. Continuous improvement in performance and VFM is necessary to generate benefits for both the client and supplier. Merely aiming to maintain performance is the equivalent of standing still. This generally requires a win - win approach and a willingness to use mechanisms such as innovation workshops, shared process improvement and value engineering. However, senior officials should never forget that private sector suppliers have a primary duty to maximise returns to their shareholders. ‘Partnership’ has become an over-used word. Development of good, collaborative relationships with suppliers is the right strategy for many major contracts, but an element of challenge, competition (potentially at least) and focus on value must be retained in such relationships. ‘Partnership’ must not mean doing only what the supplier asks.

However, findings indicate that large LAs i.e. CCC1, CCC2, and CCC3 are involved in procurement process re-engineering analysing and redesigning the procurement function to enhance overall performance. They realised that the assumptions made long ago about their goals, people and technology may have changed over time and their procurement processes maybe be stuck in the past. Nonetheless, all participant acknowledged that not a LA in Wales exists whose management doesn't want an organisation flexible enough to adjust quickly to
changing market conditions, innovative enough to deliver services through latest technologically, and dedicated enough to deliver maximum quality and customer service. This means that if management want LAs that are responsive, competitive, innovative, efficient, customer focused, and profitable, why are so many LAs clumsy, rigid, sluggish, non-competitive, uncreative, inefficient, disdainful of customer needs, and unable to meet saving’s targets? An answer to this could be because LAs are experiencing staff lost through redundancy. On the other hand under such circumstances their ability to use higher level capabilities embedded in organisational and management processes in strategic conversion could potentially be the answer.

Nonetheless, the contract management and supplier relationship management requires professionalised procurement, high-level capabilities, highly technical competencies, transformational and leadership skills, continuous development and attraction of top talented people. In an attempt to enhance effectiveness of the procurement processes WLAs as mentioned above are currently investing in building ICT and internet technology capabilities taping into technology innovation. Each of the authorities selected uses their own purchase orders systems, comprising systems from SAP, Oracle, and Civica. This means that some WLAs have made satisfactory progress improving the process analysis aspects. However, it appears that for small LAs this still remains challenging due to capability restrictions and most importantly the lack of strategic procurement leadership and cultural change.

A participant (SPM1) further echoed:

“Despite the fact that we have made satisfactory progress more needs to be done in term of the skills and capabilities needed to be involved in process analysis i.e. processes analysis of contract and supplier management requires higher level capabilities that takes time and most importantly it does require leadership and cultural change.”

Another participant (HCP) shares a similar view claiming that

“We have recently seen some progress made in this aspect, however, much more needs to be done. Building such capabilities to enable as to enhance the quality of processes i.e. analysing contract and supplier management processes and managing this effectively remains very challenging for us as the largest WLA. We
wonder how challenging a task it might be for small LAs since their capacity to be involved in such processes remains restricted due to lack of resources and capacity to do so. This might be the reason why some of them are either going back to the traditional approach (transactional/cost driven) or working collaboratively with others to get access to such expertise."

However, the five out of eleven participants also highlighted some issues with contract awarding indicating that never mind how hard they worked or how well they performed, procurement professionals still think ‘they know best’ they do not accept it since not everybody wants to be a buyer - everybody wants to give the contract to a friend or somebody they know. They do not like processes and procedures and it is all about ‘I know best’ indicating political influences. made a clear statement on this depicting the system as “...a politically driven system.”

Another participant (HP) highlighted the importance of process analysis to improve efficiency and effectiveness. She claimed:

“...under the austerity agenda, increasing demand, and higher expectation procurement executives more than ever are seeking to drive efficiencies throughout their organisations by reviewing procurement processes. A growing number of WLAs are working collaboratively to establish shared services or shared support platforms across multiple organisations. LAs in a number of regions are seeking ways to combine their purchasing power to gain increased value with suppliers, and for ways to collaborate on improved procurement processes. That is exactly what 10 South Wales LAs wanted to do when they decided to establish a shared strategic e-procurement platform.”

This indicates that procurement executives have established a good level of communication between themselves recognizing the need to working collaboratively to achieve something greater than they can individually. Although, this would be challenging since LAs are using individual systems, methods, and have their own internal cultures (see case study 3) which could be seen as an obstacle for fully collaborative procurement and combination of sourcing efforts. Case Study 4 indicates limited capability for small LAs.
Monmouthshire has a Strategic Procurement Team which is responsible for developing Procurement Strategy, policy, good practice and procedures to drive best value for money procurement. It is also responsible for Corporate Purchasing of supplies that are used commonly across the organisation. Responsibility for the more specialist service and works procurements lies with individual departments who have specific knowledge and expertise regarding their requirements.

The procurement maturity stage was “developing towards confirming.” (KPMG, 2014, p. 3) Monmouthshire is a relatively small authority with third party procurement of approximately £73m pa. The Authority agreed to create a strategic procurement unit of the Strategic Procurement Manager and one dedicated staff member and there are currently two full time CIPs qualified posts within the unit. Since its creation this strategic procurement team (SPT) has created a “buyer’s guide” for non-procurement staff in the Directorates to understand how to run a procurement, what factors to take into account and when to seek guidance from the SPT. The SPT have also completed spend analysis and created a contract register, which is reasonably comprehensive (KPMG, 2014), so that they can anticipate when contracts will expire and look to pro-actively support the Directorates. The SPT’s have limited capacity and their primary focus is on encouraging compliance to the standard procurement process outlined in the ‘buyers guide’. Monmouthshire participates in a purchasing consortium but the Authority’s influence on the consortia priorities is limited, due in part to the size of its expenditure.

In summary, from the data analysis the researcher identified elements of the procurement ecosystem for sensing the environment, understanding the supply chain and procurement processes. The data reveals that WLAs have recognized the importance of building procurement analytical systems to sense opportunities. These include processes to identify changes in customers’ needs and innovation, processes for identifying and selecting both internal and external technologies to pursue those opportunities, and processes for tapping into supplier and complementary relationships.
Procurement opportunity discovery activities are depicted in Figure 19. These activities require individual capabilities to access information and the ability to recognise, sense and shape the environment. Procurement professionals and managers have an important role to play in sensing opportunities therefore they need to be well-equipped with not only individual capabilities but also an organisational capability extending beyond the ability of individuals.

Figure 19: Procurement Ecosystem for Sensing Opportunities Capability Requirement

From the above this study suggest a set of procurement capabilities required at this stage: (1) capability to identify environmental context; (2) procurement analysis capabilities; (3) knowledge and information management capabilities; (4) commercial negotiation capabilities; (5) risk management capabilities; (6) supplier and relationship capabilities; (7) leadership capabilities; (8) cross-functional collaborative capabilities; (9) performance management capabilities; (10) contract management capabilities and (11) legislative and policy capabilities. This is supportive of the procurement professionals’ capability frameworks developed in the last ten years in Wales, Ireland, and Scotland. Observing these frameworks ten main procurement capabilities have been identified indicating elements of a unified approach towards a following public procurement capability set: (1) strategic procurement leadership;
(2) procurement analysis; (3) strategic sourcing; (4) commercial negotiation; (5) procurement risk management; (6) supplier relationship management; (7) contract management; (8) legislative and policy environment; (9) contract law; (10) cost management. These capabilities are sufficient elements of the three clusters of DCs: sensing, seizing and transforming.

Findings also suggest that WLAs are building organisational processes that allow them to respond dynamically in a way that is not dependent on one particular manager alone. Given the levels of expectation from procurement, there is clearly a high dependency on the capability of the resources and skills allocated to procurement functions in LAs. This indicates that despite the fact that all participants recognised the importance of procurement capabilities small LAs may lack the depth of these capabilities and resources and therefore their ability to embrace strategic procurement and engaging in such strategic activities is limited.

4.2.2 Seizing Opportunities: Making it happen

Developing from the sensing processes, a sharper approach to strategic procurement decision-making will further ensure that the authorities made the right choice of strategic approach, in terms of satisfying business needs from their markets via proactive and planned analysis. This stage involves the development of a procurement strategic plan determined by the evaluation of the evidence gathered at the sensing stage. This will guide the procurement team to achieve its vision and goals. In this context, findings suggests that once procurement opportunities have been identified the assessment of current resources and capabilities is required to pursue novel procurement processes. Each LA have particular designs pertaining to the seizing of opportunities that fit their organisation.

As discussed above participants recognised the importance of building public procurement capacity and capability that are of value to their customers. This might seem an obvious point to make but in practice it is often ignored or poorly understood. Some of the participants argued that some distinctive capabilities of their organisation are of value simply because they are distinctive – each LA has its own internal culture, leadership approach and related implications. Although, having capabilities that are different from other LAs is of itself, a basis of performance enhancement. Procurement managers could consider carefully which of the in because procurement activities are especially important in providing such value and also consider which are less valuable. In this context three participants (HCP, SPM1, and SPM2)
shared similar views claiming that their strategic aim is to achieve savings by establishing long-term relationships with their suppliers moving away from a transactional approach. HCP further elaborated:

“We have recently built an effective supplier management framework which appropriately aligns risk, effort and reward and is a key enabler of ongoing sustainable value creation. Although, despite all the work we have done so far with other WLAs we still fail to manage contract and suppliers due to the lack of individual capabilities. However, we are doing our best to select new suppliers. This is a key phase in the procurement process, a strategic, high value-added activity that is fundamental to our success”

This highlights again the significance of the sensing stage since it determines the decision making process in term of supplier selection. This means that it is essential for LAs to be able to deeply analyse and understand the market in order to identify that the best supplier represents a great opportunity that potential impacts their overall performance since they can achieve balance in quality, price, and effectiveness. However, to support the full range of activities involved as stated above a procurement capability set is required. It appears that the key element in building public procurement capacity and capability is the recognition of procurement professionalisation as a way of raising the profile and credibility of procurement and promoting the development of a common, transferable body of knowledge. This issue was raised by a participant claiming that “our HRM team do not recognise procurement as a profession since when it come to make savings through staff redundancy the first to be hit is procurement team.” Another participant added “I do not think HR recognise us for who we are...we are procurement professionals the same as financiers, accountants, HRMs...in fact we need to do more to recognise procurement as profession and encourage talented people to join us”

In contrast HCP clamed:

“We do recognise procurement as a profession and that is why we have manage to create a cross-functional procurement team securing a considerable budget to continue their development. Despite the austerity agenda and pressures to reduce procurement staff we are still keeping them in. This time on a part-time basis but
we still have access to their skills, knowledge and expertise. However, how long we going to keep them and resisting financial pressures is unknown...”

However, building procurement capabilities has becoming a key focus as an essential part of the leadership agenda since their responsibility is to ensure that procurement is set up for success envolving talent to succeed in the current complex environment. It appears that during the implementation of procurement capacity and capability building programs tensions develop between delivering short-term economic objectives alongside broader strategic long-term objectives. In this context a participant (HP) explained:

“First we need to secure the capabilities required to fulfil the day to day task. In building several capabilities that suit the requirement of strategic, operation and technology capabilities that enable us to identify collaborative and innovative opportunities and become futuristic, we need to be an enabling organisation. Instead of being procurement process driven, we need to be more strategic, enabling the organisation to realise some of these things. i.e. traditionally we have lead frameworks and contracts that are always very short term - 2-4 years. My vision is to allow longer-time partnering type contracts and manage service type contracts which would allow us to become more flexible and innovative rather than following a standard approach to a framework that we are rigidly stuck.”

The participant further elaborated:

“...we are building capabilities that enable us to develop an environment of commitment and loyalty within the authority and outside the authority. Training programmes are in place for workers so that they can be available to give commitment towards their customers. I personally develop incentives for our procurement staff, who present the solutions to seek and seize business opportunities. The procurement team present different solutions related to the management of resources and effective implementation of the supply chain processes and structure. We have a centralised structure for supply chain management.”
This indicates that large LAs are creating the infrastructure that enables them to work with a more entrepreneurial approach building unique resources and core competencies (see Case Study 1). However, it could be argued that uniqueness/or rarity may depend on who owns the competency and how easily transferable it is. i.e. the main fear of the participant was the fact that due to savings pressures they are losing procurement experts. This means that individuals with procurement knowledge and expertise may leave or join another organisation; this resource may be a fragile basis of advantage. More durable advantages may be found in competences that exist for recruiting, training, motivating and rewarding such individuals or be embedded in the culture that attracts them to the procurement field. Nonetheless, small LAs seem to focus more on capabilities that enable them to complete day-to-day tasks using repetitive routines rather than focusing on long-term perspective.

Alongside capacity and capability development the integration of strategic suppliers into long-term demand planning process will yield value. However, findings indicate that supplier risk assessment is poorly executed in many WLAs, and particularly in small WLAs due to the lack of the capabilities to engage in such activities. A participant (SPM3) claimed:

“Supplier risk assessment is not the only parameter that should be assessed during the sourcing phase but also continuous monitoring and management for us remains very challenging - we are inclined to working with other WLAs to address the challenge.”

Another participant (SPM1) further suggests:

“The current contract and supplier relationship framework needs to be more inclusive in term of explicit segmentations: strategic, operational, and tactical aspects combined with a performance management framework making clear articulations of organisational accountability and responsibility.”

Furthermore, a participant (HP) echoed:

“WLAs need to ensure that value is not lost due to lack of comprehensive contract management processes that cover the performance management risk. We need to join a central body of collaboratively procurement making it easier for us to gain
access to the capabilities required to avoid this since what is stated in our strategy statement is often used as a façade."

Nine participants from WLAs accepted their failure on contract management and supplier relationships. They all stated that there is a contract management framework that outlines the activities that WLAs should consider when planning and delivering contract management. The framework was updated in December 2016 but also has thrown up new challenges which are not easy to surmount. The National Audit Office (2017) publishes a report highlighting the widespread problems found in administration, including poor governance and record keeping, and capacity issues. DNPS and HCM echoed the issues stating that “We have offered already our expertise to LAs but we haven’t had a very positive response…”

In this context, one of the challenges that LAs are currently facing is devolved procurement activities where the central procurement team has no control of procurement activities carried out in other departments across authorities. This was echoed by HP stating:

“One reason why we continually fail on contract and supplier relationships is that we need to live and breathe it. We need to have dedicated resources to manage contracts...once a supply partner contract has been specified and designed within procurement with its technical expertise then it goes back to the client department team to manage thereafter.”

This indicate the complexity of the current processes/procedures since the person who defined the contract specification is no longer close to the process. The participant further explained: “...unless you write the contract, sit down and live it, you will never manage it.’ Hence all participants recognised that more needs to be done to centralise procurement organisation for all goods and services with a single upward reporting structure to maximise leverage, streamline procurement organisation and create procurement expertise. This means that developing procurement organisational structure capabilities is significant for WLAs. This could potentially be seen from the strategic suppliers’ perspective. In this context HP further elaborated

“We need to look at it from the perspective of supplier relationship and invest more in this area since we have not done enough. We think we do talk to our strategic
suppliers...well typing an email is not speaking to your supply base. So, if we need something from them we need to create a relationship. i.e. if I have a 10-year contract that I have to manage through a contract manager in the supplier and a contract manager in my LA. They both know the document inside out and they can get a relationship going, as long as the integrity part of it remains and they don’t cross any boundaries, then they should drive that contract to their best ability for benefits of both organisations.”

This indicates that contract and supplier management performance seems to be very challenging procurement activities for small and large WLAs potentially due to restricted skills and limited competencies held. Alongside other strategic procurement activities this also requires a highly skilled procurement professional equipped with high-level capabilities, capable to understand and identify the level of contract management activities; assessing the nature of the relationship with the suppliers in line with organisational strategic suppliers; relationship management processes and strategy and establish effective relationships, behaviours and governance mechanisms.

However, in summary from the interviews SPM4, SPM3, and HP shared a controversial view summarised as” we think we need to go back to what was old fashioned with the old-fashioned way of working, where you had a relationship and you knew who you were buying from.” HP further explained “we are working collaborative with Directorates to define supply need pro-actively...this all we can do”

Findings indicate that procurement strategy formation is another process that determines the ability of LAs to seize opportunities. Executives play an essential role in establishing a clear vision and goals having a good understanding of priorities and the context in which they operate. This enables them to identify strategic alternatives for procurement and design the course of action. As a result, systematic analysis and sensing process play a significant role in the process of strategy development. A participant (HCP) depicted this as:

“It is essential for us to ensure that everybody is engaged and understands the procurement strategy. This could be achieved through an inclusive process...I mean that the strategic plan should be discussed not only with members of the
procurement team but also with other key internal and external stakeholders through workshops, conversations, negotiations and interactions.”

This indicates that at this stage the ability of procurement leaders to formulate the strategy that is fit-for-purpose not only for the authority but also for strategic stakeholders requires high level capabilities. Strategic formation and implementation capabilities could play a significant role in assembling different initiatives into a coherent programme that can deliver the strategy. The strategic formulation capabilities could be potentially essential to establish performance links between projects and strategy ensuring that all strategic goals are delivered. All participants representing WLAs acknowledged that with any strategic endeavour it is necessary to define the priorities, taking a long-term view of what is expected and how it fits with the rest of the procurement strategy, creating a strategic picture describing the key initiatives that are to be pursued and how they fit within the procurement operation. In this context, strategic planning that spells out the goals, performance measures, critical success factors, and most importantly the skills and resources required to deliver the strategy are important aspects.

In order to gain further insight the procurement strategies of the WLAs sampled have been reviewed and it has been found that four out of six procurement strategies had not been reviewed for years i.e. [redacted] and [redacted] procurement strategy reviews dated back between 2013 and 2015 indicating some potential issues. Yet again ‘they say one thing and they do something else’. HP echoed:

“...our procurement strategy is out of date now. It came to an end in 2015. We are back waiting for a white paper, out of local government, out of the Welsh government in relation to collaboration. We waited for that. We have got the Wales Procurement Policy, which we have always adhered to and worked towards, but we have not renewed our strategy since, I think it is time for change to re-brand ourselves...we need to change the world somehow; we need to be something else. I do not know what that is, I have no idea but we do...you say strategy and people think ‘Oh God’...”

The above suggests that this WLA is inclined to advance beyond the traditional in terms of strategic formation process inventing new approaches in term of service design. Further supporting this a participant (LPS) explained:
“...in term of service design, we take into consideration the data gathered through sensing processes with particular focus on the market position statement and suppliers appraisal. This enables us to develop those options and design the strategy that fits to the needs of the region since it is not the only way of exploring opportunities but it is essential to understand what is suitable for PCC.”

The participant further explained:

“Sometimes there is no absolute fit since if we are going to market we need to deliver what is required in the market rather than being obliged to achieve something that no one has ever achieved. So, we have to be realistic and react based on our capabilities.”

From the above WLAs seize procurement opportunities through the four main activities shown in Figure 18. Although, these activities should be aligned with the effective utilisation of procurement capabilities, which remains an important managerial task, however, this remains a very challenging task for small WLAs lacking the depth of capabilities, particularly managerial capabilities. Findings also demonstrate at this stage four particular capability set are potentially significant: (1) Strategic formation and implementation capabilities; (2) capabilities to design and refine procurement model; (3) capabilities to design and refine tender specification and contract awards; and (4) market and supplier development capabilities. These procurement capability sets are underpinned by procurement routines and processes, the gradual improvement of which punctuated by innovative (non-routine) managerial interventions.

Drawing upon the above discussion, small WLAs may lack these capabilities. In contrast, findings suggest that large WLAs i.e CCC1 posses such capabilities as a result has been recognised as a leading procurement organization. CCC1 has designed a comprehensive procurement strategy that facilitates advanced procurement and higher level procurement capabilities. They have established leading-edge procurement capabilities to address volatility and supply risk. Their strength lies in the managerial ability to change procurement processes and procedures that could be translated into procurement transformation.
Although, it is important to highlight that various elements of procurement strategy must be aligned and coherent with the entire authority’s strategy and its business model. The above suggest that despite current challenges WLAs are seeking to develop and deploy higher level procurement capabilities, using them in a strategic conversion to enhance their overall performance.

4.2.3 Transforming

The strength of WLAs capabilities is developed when procurement changes are translated into an entire organisational transformation. Providing a new procurement strategy and model is not an impossible reach from the existing one, excellent asset (tangible and intangible) orchestration skills are needed to effectively manage a new procurement approach alongside existing operations. All participants acknowledged that leading WLAs have recognised the value that continuous development and procurement transformation can deliver, referring to a specific type of organisational change management which focuses on strategies to enable major
and long-term improvements to procurement and supply management processes, activities and relationships. A participant (HP) claimed:

“…we are so restrained by resources and finance I think the only way we can transform and change the things we procure is embracing innovation. The rational for the use public sector procurement to stimulate innovation relates to the fact that it is a major part of local demand which means that it could generate innovation in a given location. Another rational is that the development of innovative solutions offers potential for improving public infrastructure and public service in general. This is important since we need to prepare for future challenges therefore we need to be capable of reshaping internal operations and external relationships. This process requires not only managerial capability but also transformational leadership and public sector cultural change.”

Another participant (HCP) claimed:

“There is a range of the market and system failures affecting the translation of needs into functioning markets for innovation products, and public procurement can prove effective in redressing this”

In contrast, a participant (HP) echoed:

“There is little incentive for LAs to use procurement as a means to stimulate innovation. Our buyers are not rewarded for procuring innovation. Generally the focus is upon savings or doing more with less...another thinking is this, procurement people in WLAs understand that innovation can be a way of achieving goals, but this is often not explicit and there is a conflict with short-term strategy and savings targets.”

To summarise participants’ interviews the researcher noticed that four participants SPM1, SPM3 and SPM4 shared similar view on the role of innovation in public sector procurement. They stated this, “with no intention to underestimate the impact that innovation could have in public sector procurement our main goal is to ensure the quality of government services and the use of the products and services for the public sector.” Knowing that the public sector has multi-objectives policy innovation can be one of their objectives that may not be a priority.
These participants also highlighted the importance of leadership and cultural change as enablers for procurement innovation.

Case study 5 also illustrate aspects of procurement leadership and governance in context of procurement transformation.

**Case study 5: Newport County Council: Impacts of Procurement Leadership and Governance on Procurement Transformation**

Newport has a devolved procurement structure, supported by a small central procurement team, which will be further reduced due to the austerity agenda and pressures to increase savings. Procurement is part of the Authority’s change programme and in 2013 the Authority introduced a category management approach across the organisation. Although, since then this approach has only been partly implemented due to a lack of capabilities. The devolved nature of procurement in this authority imposes limited visibility by the central team of procurement. This potentially is a key opportunity for procurement to drive savings, ensure compliance and transparency across the organisation.

There had been a conscious plan to invest in resources with the creation of three new category management roles, with the final two being filled in October 2013. The new procurement approach is in its infancy and the Authority has the opportunity to use the procurement resources created and the new structure to make the savings it needs in line with the Settlement targets. Consequently, performance is expected to improve significantly over the next year or two as the new procurement organisation begins to embed itself. Although, the frequent changes in procurement leadership has slowed down the speed of development, by not championing and pushing forward the procurement agenda to help maximise the cost savings. According to a KPMG Report (2013) the leadership and governance were not strong enough to provide guidance and increasing the profile of procurement across the organisation. This also reflects the non-conforming level of maturity in the areas of contract management, where the central team needed more involvement in contract and supplier management providing commercial challenge and market insights through development strategic relationships with the supplier at a category level.
The procurement team is relatively small therefore they are not in the position to provide training for non-procurement staff to ensure they have an appropriate skills and confidence to do the job when it is challenging. Although, the Welsh Procurement Competency Framework was introduced in 2013 the authority uses its own internal competency framework to monitoring staff performance. However, the framework potentially could be incorporated into procurement objectives as appropriate and ensure that non-procurement staff involved in procurement participate in the framework assessment also to identify training needs.

Procurement structure is another key factor that influences the transformation stage, which entails complex relationships between departments. Five out of six WLAs interviewed are inclined to adopt a centralised structure for procurement processes and procedures so that they can reach all customers they have targeted. Pertaining to the above, one of the participants (SPM2) stated:

“...we are using a centralised process for seizing opportunities. I require my subordinates and other managers to present the solutions and methods to seize a prevailing opportunity in the market... I am interested in developing a business model that incorporates the seizing of apparent opportunities in the market by paying maximum attention to retaining the confidence of customers.”

Another participant (HP) also stated:

“...procurement in our LA is centralised. It is seen as a corporate function and has a head of procurement who sits on the senior management team and the leadership team. The head of procurement reports into a Director...the team underneath is divided into two categories...we have got contracts managers, senior buyers, buyers, buyers assistants and then on the other side we have a business operational team, which comprises supplier development, e-procurement, and admin. However, not long ago it was a team of 28 staff now we are down to 16 since people left and we never replaced them due to financial difficulties.”

It is apparent that strategic decisions are central to managers when implementing the processes and structures of procurement. Moreover, respondents encouraged their workers to bring innovative ideas related to procurement and other functions of their LAs. Likewise, the
business model is also developed in line with prevailing opportunities, so that LAs can seek and seize concurrent business opportunities. Alongside, decision-making protocols have also much significance because they allow managers to make decisions that can best fit the prevailing business opportunities in the market. In summary from an interview scripts SPM1, SPM3, SPM4, and HP stated: “Our current goal is to deliver the best possible service to the clients and the people of CCC2, CCC3, MCC, NCC, and social and economic regeneration.”

In summary, findings indicate that WLAs are evaluating the evidence gathered at the sensing stage to inform strategic decision-making processes. They are currently focusing on higher level activities that determine procurement strategic policy formation and implementation beside the higher level capability requirement. One key focus is also the procurement model making sure that the model implemented is fit – for – purpose enabling managers to address the uncertain environment yet achieved also meet higher demand making sure that the outcome is greater than that which previously has been. However, the ability to envolve such activities varies among LAs. A participant (SPM3) claimed:

“…despite the relatively small size of the procurement team and the lack of other resources and sometimes procurement expertise we are committed to continue to seize opportunities by transforming the way we buy goods, services and work. We are continually working to put in place a model that reflects the needs of the Council with regards to its procurement and commissioning activities which also reflects a changing approach towards all stakeholders, partners and suppliers in our supply chain.”

Case study 6 demonstrate that LAs commercial and commissioning approach could be the future orientation of WLAs.


During 2015/16 the council spent £146m per year with external suppliers in revenue and capital expenditure and it was essential that this money be used in the most effective way to achieve its objectives and desired outcomes for residents (Commissioning and Commercial Strategy, 2017). The Head of Commissioning and Commercial Service had only recently been appointed
to the role making significant changes introducing a CM approach and enhancing the procurement team to elevate the profile of procurement, increase its effectiveness and expand procurements span of influence.

In 2014 the central procurement unit (CPU) comprised of three staff and was limited in the range of activities it can support (KPMG, 2014). Historically the CPU has focused on managing compliance to ‘OJEU’ and service directorates managed their own procurements. More recently the CPU had been working to offer support to the directorates but there are barriers to overcome.

However, in 2017 after a new Head of Commissioning and Commercial Service joined the authority the procurement team was enlarged. So, the procurement team currently comprises nine staff, of which only two have CIPS qualification. The Adult Social Care (ASC) directorate has been employing an interim to provide their procurement resource but this manager will be leaving the Authority shortly. The CPU has cleansed the contracts register (held on the Bravo system) and has recently introduced a suite of contract spend reports that are published to Heads of Service, the Commissioning & Procurement Board, and portfolio holders for Procurement & Finance. The Commissioning and Commercial Service Structure alongside the Commissioning and Commercial Hub and Spoke Operating Model (See Figure 2 And Figure 3 in Appendix).

This is beginning to raise the profile of procurement and encouraging the departments to call on the CPU for their advice and support.

The Head of Procurement has introduced workshops with Directorates to discuss these spend reports and discuss how procurement might help. They recognise the need to change the way it works to tackle the growing challenges of reducing budgets and increasing demands, while meeting the aspirations of residents and service users. As part of its response to these challenges the council is looking to more innovative and efficient service models that deliver best value services delivering sustainable outcomes while supporting the county’s local economy. A key component in that response is becoming a commissioning council, one that regularly challenges the need for a service or the way it is delivered in the county in an attempt to make sure precious resources are used effectively.
The capability and capacity building is another key focused of a new strategy. According to their Commissioning and Commercial Strategy 2017-2020 (2017, p. 15)

“The council has already established commercial and commissioning training for all its commissioners and developed a Commissioning Toolkit and this will be enhanced to include contract management and market analysis. The council will continue to offer a training and development programme to improve its commercial capability and equip staff with the skills they need.”

However, the procurement strategy document provides promising insights the procurement capability section is the briefest section of the strategy 2017-2020.

It appears that individual councils are conducting their procurement completely independently rather than using collaborative - joint procurement by integrating their procurement via a centralised body. However, the procurement structure does not stand alone, it requires cultural and strategic support that varies between WLAs depending on their strategic objectives, goals, governance model and values, coupled with the maturity level of its procurement function. This means that the WLAs are at different stages of development and that a “one size fits all” approach would not be appropriate, although much could be learnt from the experience of other WLAs, sectors and levels of central government. Table 33 provides an overview of the procurement structures within the six selected WLAs. The table indicates that three (CCC1; CCC3; and PCC) out of six WLAs deploy a centralised procurement structure, CCC2 is working towards centred structure and MCC and NCC favours decentralised.

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<th>Local Authorities</th>
<th>Procurement Structure</th>
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<td>CCC2</td>
<td>Towards Centralised Structure</td>
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<td>MCC</td>
<td>Decentralised – supported by a small central procurement team</td>
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<tr>
<td>CCC3</td>
<td>Centralised.</td>
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<tr>
<td>NCC</td>
<td>Decentralised– supported by a small central procurement team</td>
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<td>PCC</td>
<td>Centralised.</td>
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The size of the central team could be seen as a factor that determines their structural approach. This indicates also the challenge they are currently facing to balance the three procurement value propositions: effectiveness, efficiency and customer service with a complex and challenging (particularly financially) environment.

This was echoed by participants acknowledging the requirement for a new approach to enable continuous procurement improvement and transformation through a centralised structure. The structure tends to maximise corporate leverage, streamline purchasing organisation, and creating corporate procurement expertise. However, it also has disadvantages such as removing purchasing from operations, lowered local responsibilities, and less divisional control. This indicates that LAs are seeking to improve efficiency and effectiveness as a priority. In contrast, a decentralised structure has a tendency to favour customer service and effectiveness i.e. two small LAs; MCC and NCC currently implementing a decentralised structure complimented by a strategic sourcing approach and small central procurement team accordingly.

A participant (SPM3) claimed:

“The approach enables us to be continually responsive to customers’ needs enhancing and embracing new technology, with the absence of a high degree of decentralisation this might not be possible.”

In contrast, another participants (HP) highlighted issues with the structure claiming that

“Structural issues are evident in WLAs i.e. opportunities are lost in terms of contract management... because of the structural issues it become a client department issue within procurement and as a result people are not taking it forward and making sure it happens...they are not bringing them to realization.”

In summary of the interview scripts, it appears that six out of nine participants stated, “due to the challenges that WLAs are currently facing there is a need for a new reconfigured structural approach...” A participant mentioned a ‘hybrid structure’ as a solution to enhancing flexibility and responsiveness.
This indicates that LAs in the sample have a less uniformed structural approach. Some authorities have a fairly large centralised purchasing functions but no centralised department and in practice all authorities have some degree of devolved procurement. Where procurement is devolved there may be a person with a dedicated procurement role or it may be part of a wider job description. The profile of the function has steadily grown and it is now generally recognised as a ‘specialist’ role within public sector organisations. This has created a need for better-qualified procurement staff. Although, seven out of eleven participants echoed this sentiment “...we are dreadful, because we haven’t got the resources we need.” Overall, it appears that the structural issues and lack of resources leads to a poor contract management experience in WLAs making it a challenge to seize opportunities.

Participants also recognised contract and supplier relationship management as an essential element to drive continuous improvement and innovation enhancing overall performance. Eight out of eleven participants stated that central procurement teams are not directly involved in contract management as such since they only facilitate and guide people though procurement processes up to the award stage. When they reach the award and the implementation stage they hand it over to the department within service to manage the contract. This, unless there is a contractual issue where procurement are consulted or legal representatives may need to get involved if there is a breach of contract. This indicates a capability gap to align all contract management activities enabling them to be involved not only up to the contract award but also monitoring the performance side ensuring that the outcome is greater than disjoined through activities.

In support to the above six participants shared the same view claiming:

“The role of leadership in this process is significant since it contributes to well-developed policies, procedures and systems to support contract and relationship management to drive forward strategic planning, cost control and contractor performance” This is also echoed on the National Procurement Strategy Draft 2018.

However, another participant (HCP) identified knowledge management as a key factor of procurement transformation claiming:
“It is all about embedding what is in place and thinking how we can develop that further in order to improve what we are currently delivering. In this context learning and knowledge management is very much part of moving forward. Sharing and learning from experience is vital- Knowledge management becomes a very important part that enables our authority to take things to another level.”

The participant further elaborated:

“Perhaps we need to think about a new fresh start, redesigning procurement and embedding this in services, although, sometimes it is out of our hands i.e. we are trying to develop a new system for transport but we have complaints from suppliers since they find it very difficult to engage with our procurement team.”

Nonetheless, for small LAs the knowledge management task remains challenging. A participant (SPM4) claimed:

“...the knowledge management task is quite challenging for us since we are losing knowledgeable people due to massive restructuring of the pay and reward scheme in our LA in an attempt to achieve savings reducing salaries and downgrading. Therefore a huge amount of people have left the organization so we have experienced an exit of knowledge and skills. It will take time to go back to the stage we were at two years ago”

This demonstrates that that procurement capability and expertise are further shrinking due to the austerity agenda and the potential implications of this.

The specific nuances of implementing change within the procurement function differ from change management initiatives in other functions, the underlying principles determining the success or failure of changing processes, practices and behaviours remain similar. A turbulent and unstable political and economic environment, globalisation, technology and product innovations require LAs to develop change capabilities and acquire knowledge of change management. Change management is generally a complicated process, which involves complex analytical, political, and cultural processes by challenging and changing the core beliefs, structure and strategy of WLAs (National Procurement Strategy Draft 2018).
Findings indicate that the impetus for the procurement function in light of current developments is becoming more strategic and stronger than ever. Procurement transformation relies on the application of various tactical, strategic and transformational tools and techniques and can positively impact many areas.

Another key factor that impacts the degree of procurement transformation is cultural change. Case study 4 illustrates some of the positive impacts and also reasons why it is still remaining challenging for LAs becoming one of the major barrier to procurement transformation. This potentially could be due to the length of the time required to develop a culture that encourages high involvement in knowledge management, contact management embracing flexible structure and governance, collaborative procurement and innovation. The National Procurement Strategy (2018) clearly highlights the importance of cultural change - changing behaviour and mind-set towards procurement. An explicit statement has been made the “procurement staff are encouraged to...demonstrate commercial behaviour” (2018, p. 9).

In this context a participant (LPS) claimed:

"...over the last three years there has definitely have been a cultural change...it took a long time to develop ... success has been visible and well communicated and the new norms and values apparently backed with incentives."

A participant further elaborates:

“...we do change a culture by changing processes and behaviour being much more open with suppliers or stakeholder involved. Speaking with them, and developing understanding of procurement and explaining what this means which could enhance our understanding about each-other and as a result changing the way how we do things would be inevitable .”

Controversially, a participant (HP) stated:

“"We have not seen a cultural change in term of the organisation’s viewpoint of procurement. They have always hated it and still do today. I think this comes from
the top of the organization since they do not recognise procurement. When we had a Chief Executive who recognised procurement and saw its value there was a different perception throughout the whole organisation. In terms of the cultural differences within the service area particularly in my team there has been a big cultural change from very much transactional change to a more strategic approach.”

In this context another participant further elaborated:

“We like to think that we can see cultural changes, although, within procurement this remains challenging since HR do not see procurement as a strategic function. As a result changing from service provider behaviour to commercialism is challenging and also there are no incentives to do so since my category managers are paid significantly less than others in CCC1. This has to come from the top – from the leadership. If their behaviour towards procurement change than we will change with it”

This indicates that cultural change within procurement remains challenging for some of the WLAs due to the procurement position within the organisation. It is important for senior leaders to recognise the true business and organisational impact of procurement and its impact into overall performance of WLAs. The recognition of cultural and leadership change as influential factors in procurement transformation is evident among all participants, with one of them (HCP) claiming:

“...current changes in organizational culture and leadership have enabled the Council to design an ambitious strategy 'growing' its own procurement staff by investing in training and mentoring to support staff development...we see this as an investment in the future and recognition of challenges to recruiting suitably qualified and experienced staff in a competitive local market.”

Another participant claimed:

“The role of procurement leadership is significant i.e. previously we had a procurement leader who did not have the relevant qualifications and also she did
not work collaboratively with the team but she liked controlling and had the kind of programmatic approach ‘do as I say’. Therefore it did not work since she did not work collaboratively with the management team driving the change together.”

In contrast, another participant (HP) that comes from another WLA that is politically very different clamed: “The leader is very innovative. He likes change and drives these changes as well.” A participant further elaborated:

“Procurement has changed, is changing, and will continue to change. The WLAs themselves culturally have accepted more the role of procurement. Although, inevitably the change is mainly driven by an austerity agenda...I have a viewpoint that procurement can change the world and I believe my team do too.”

This indicates that stronger leadership shapes organisational culture and drive continuous change playing a significant role in procurement transformation. Leading, managing and delivering Governments’ VFM policy is challenging in any WLAs, but those challenges appear to be magnified in small LAs. Small LAs are not attractive to high-calibre leaders’ even managers and procurement professionals, which further ads to the problems of breath and depth of capacity. This has been seen as a drive for collaborative procurement i.e. CCC2 and Pembrokeshire. However, there is no doubt in the researcher’s mind that some of the small LAs enjoy very high-quality leadership. Some of them displayed some of the most innovative approaches.

Alongside an innovation procurement structure, leadership and cultural change is another critical strategic element associated with transformation in governance. This is an essential factor in building procurement capabilities and ensuring that benefits from strategic procurement activities are maximized and impact across the whole organisation. In this context all participants acknowledged the importance of a comprehensive governance framework that enabled the alignment of all governance building blocks in order to transform procurement capabilities i.e. Cardiff Council continues to ensure that the Council complies with relevant legislation and that the governance and risk management arrangements of the Council are proportionate and followed. To achieve this, they focus on five main aspects: (1) Maintain a procurement forward plan of procurement projects to improve how they manage and deliver these projects. (2) Ensure that procurement policies and procedures are regularly reviewed and
kept up to date. (3) Improve contract management across the Council by supporting Directorates in actively managing contracts. (4) Continue to report on procurement performance and compliance to the Senior Management Team at least every 6 months and (5) Ensure staff across the Council are trained in the Council’s Policies and Procedures.

In attempt to get an overview of the role of governance participants were asked to enlighten on the role of governance in their LAs. In this context, a participant (HP) claimed:

“The head of procurement must always be at the top table otherwise there is no power and you may as well not be there...I have seen strong governance creating negativity because they see governance as process rather than allowing innovation and flexibility...It is about how we use governance and power to ensure we enable rather than stifle.”

This indicates that the governance framework should not only make sure that procurement processes, systems, tools, techniques are documented, referenced and maintained as operating procedures consistent with the corporate standards but also empower procurement professionals encouraging creativity and innovation. A participant (HP) illustrates this by claiming:

“Procurement is going back to its roots becoming very mechanistic, leaving no room for a cognitive approach...I have procurement people who still say the computer says no...or the lawyers always urge you 'you cannot do that'...and you always get a supplier that can challenge you...all procurement people know it is time for change but how are we going to change...remains unknown.”

The participant also indicated that the complexity and challenges towards procurement governance are evident. WLAs are governed by public procurement directives, which mean that they have to make sure that they are compiling with procurement regulatory framework, policies, and the operational business plan activities. In summary of interview scripts it could be said that nine of eleven participant (HCP, ARM, SPM1, SPM2, CMO, SPM3, SPM4, HP, LPs) claimed: “change is on the way preparing for futuristic procurement...going against the nature of public sector organisation we are seeking to behave in more entrepreneurial way, although, there are lot of challenges to overcome.” However, their degree of change determined by the ability to develop and deploy high order capabilities using them in strategic
conversion to address the environmental challenges and also improve the overall performance of WLAs. In support to this a participant (HP) specifically stated:

“...when certain thresholds changes, we have to ensure that we abide by the change...the recent change has given us a great flexibility...we are constantly reviewing and look for innovative approaches i.e. with passenger transport, we are now concluding a tender exercise where we are going to have a meeting to analyse lessons learned. Currently we are changing a number of specifications based on the questions that we are using; some work is particularly good and some need further amendments.”

In summary, the above indicates that WLAs will continue to face a highly dynamic and increasingly complex operating environments. Therefore, the ability to manage change and transform procurement is key to their success. Although change is not an easy process, the benefits for organisations can be substantial if the process is carefully planned and executed. The ability of public sector management to create procurement values by combining the resource base with higher order capabilities creates opportunity.

With intangible assets being critical to WLAs success, governance and incentive structures designed to encourage learning creating a new knowledge bank and procurement expertise and innovation become indispensable. Findings indicates that sensing procurement opportunities requires learning about the environment and new technological capabilities and promoting learning through R&D. In the context of transforming the ability to integrate and combine assets, developing knowledge is a core managerial skill. WLAs are working collaboratively or changing their procurement models to enable them to gain access to or build the skills and expertise that are required to address the current environment. They have built the systems that enable them to integrate know-how from outside within the LAs. All participants recognised that well designed incentives and the creation of a cultural sharing and learning environment as well as other instruments like knowledge shareing, and knowledge integration procedures are likely to enhance procurement performance. On the other hand they acknowledged that this could be misused since they do not have the capability to proactively monitor and protect their tacit knowledge.
Findings indicates that some of the WLAs i.e. MCC, NCC and PCC expect procurement to fulfil its traditional role, which includes supplying needed goods and services and managing spending categories and key supplier relationship. However, PCC has design a very ambitions procurement strategy with an explicit vision of being an “innovative, agile commissioning organisation” (Powys Commissioning and Commercial Strategy 2018, p. 5) indicating that procurement has been considered as a strategic tool that contributes to the entire authority to address a dynamic environment and facilitate the substantial organisational development required to achieve strategic objectives. MCC also are seeking new approaches to enhance capabilities and even to seek and maintain competitive advantage – this required a new approach to building and applying skills. Training programs should expand their focus on advanced capabilities that capture strategic value in critical spending areas.

Drwaing upon the main points discussed in this section Figure 21 aligns strategic activities and capability requirement that enable continuous development and transformation of the procurement function. As indicated from above this particular stage required higher order capabilities advancing the maturity stage of procurement and most importantly meeting strategic objectives of LAs. The alignment of procurement structure, governance, knowledge management and knowledge exchange, innovation and collaboration, supply and contract management, and investment in staff development are essential strategic activities where higher order capabilities are embedded. Findings also suggest that transformational leadership and cultural change are significant driving factors for transformation through development and deployment of the higher order capabilities required in the current complex and unpredictable environment to enhance organizational performance.
4.3 Reaction to Research: Participant Validation

As stated in chapter 3 the interviews were undertaken with procurement experts from six WLAs and NPS an overarching body established and supported by WG. The greatest part was conducted with participants being unaware of the full extent of the research project and most importantly not knowing or recognising the existence of dynamic capabilities (DCs) not only in practice but also in theory. Although, for all participants a brief on the DCs concept was sent via email prior to the interview. By the end of the interview participants were confident that this has a huge potential that could be used as a managerial tool that aligns three stage procurement strategic activities with the capability set required in each stage. The researcher has continued to discuss their interpretation of DCs with particular focus on three clusters: sensing, seizing, and transforming in order to have some insights in the applicability of the concept in a public procurement context.

The nine participants representing WLAs have endorsed the study. Their reaction to the use of the DCs concept that has been mainly implemented in private sector organisations in the context of public procurement was generally positive, despite the fact that at the beginning they
all expressed their scepticism since the concept was unknown to them. At the end of the interview all participant described the approach as ‘very interesting’ and fully agreed respectively. Eight out of eleven participants stated, “We could see this working in practice similar to the category management framework creating the microfoundation of DCs in public procurement”. Some of the responses were more enthusiastic, with the participants immediately adapted the researches’ terminology. Six out of eleven participants stated: “this is futuristic concept that could be successfully implemented in public sector organisations.” One has issued an invitation for workshops with an intention to convert the potential of the DCs concept in to public sector procurement practice.

On the other hand participants from small LAs expressed their concerns in regards to a central practical implication since ‘DCs cannot be bought in markets but have to be built internally by the organisation through experience’ (Teece et al., 1997; Teece, 2007; Teece, 2012).’

The reaction to the research confirmed that the investigation of DCs in public procurement was viable and valuable as a means of aiding understanding on how to change and enhance their performance. However, there are other possibilities – the participants may have voiced agreement in order to please the researcher. HCP stated: “it will be essential to analyse the factors that shape the development of the organisational routines in public sector since it differs from private sector.”

All participants had the same freedom of expression and the researcher had no influence over their opinion. The researcher has considered the participants’ view as an important aspect since it indicates the degree of interest in the study.

4.4 Conclusion

Findings indicate that WLAs are continually facing a number of challenges. One challenge is whether their current procurement approach is able to continue to absorb budget reduction, and all the other pressures. As a result they are increasingly looking for ways to review their procurement approach to ensure that it remains fit for purpose in the context of the austerity agenda - preparing strategies to help mitigate these pressures. WLAs are continuing to analyse the different ways in which austerity is affecting their performance. This gives rise to different approaches that potentially could be adopted to cost savings and service delivery. Procurement is generally seen as a strategic tool, playing a proactive role in meeting these challenges.
Table 34: Key Dimensions of Strategic Procurement of six WLAs

<table>
<thead>
<tr>
<th>Strategic Procurement Dimensions</th>
<th>CCC2</th>
<th>CCC2</th>
<th>MCC</th>
<th>CCC3</th>
<th>NCC</th>
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<tr>
<td><strong>Visibility of Procurement</strong></td>
<td>Internally procurement is seen as a driver of organisational performance - savings potential.</td>
<td>Recently it has started to become visible internally and externally-savings potential.</td>
<td>Procurement profile is based on savings potential and some degree of innovation.</td>
<td>Internally procurement is seen as a tool that enhance savings ans as a result it is visible.</td>
<td>No prominent.</td>
<td>Profile based on savings potential.</td>
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<td><strong>Procurement involvement in organisational strategy</strong></td>
<td>Influences organisational strategy.</td>
<td>Supports organisational strategy.</td>
<td>Independent from organisational strategy.</td>
<td>Supports organisational strategy.</td>
<td>Supports organisational strategy.</td>
<td>Some degree of indpendence from the organisation’s strategy.</td>
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<td><strong>Scope of procurement activities</strong></td>
<td>Working towards end-to-end supply chain management and long-term relationship with suppliers. Involved in commercial activities (value driven).</td>
<td>Relationship and supplier development. Local suppliers as strategic sourcing. Commercial activities (cost driven).</td>
<td>Clerical in nature. Tendering. Negotiation- getting the deal.</td>
<td>Working towards end-to-end local supply chain.</td>
<td>Some degree of involvement in commercial activities.</td>
<td>Comercial activities. Tendering, negotiation and getting the deal.</td>
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### Procurement Professional capability set/skills and knowledge

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### Key performance indicators (KPIs)

| Balanced scorecard        | Targets and reviews focus on financial results | Targets and reviews focus on financial results | Continuous monitoring | Targets and reviews focus on financial results |
| Focused on value creation, | Focus on price reduction and contract coverage | Focus on price reduction and contract coverage | Focused on value creation, innovation, sustainability and continuous improvement | Focus on price reduction and contract coverage |
| innovation, sustainability and continuous improvement | | | | |

| Continuous monitoring     | Focused on value creation, innovation, sustainability and continuous improvement | Focused on value creation, innovation, sustainability and continuous improvement | Focused on price reduction and contract coverage | Focused on price reduction and contract coverage |
| balanced scorecard focus on financial results | | | | |
| Focused on price reduction and contract coverage | | | | |
| Focus on price reduction and contract coverage | | | | |
| Focus on price reduction and contract coverage | | | | |
However, Table 34 indicates that much of the public sector procurement is traditional in form. Hence, strategic procurement is only an approach that public sector has put on their agenda. Drawing upon findings the table summarises the key dimensions of strategic procurement for the six selected WLAs. Some elements of strategic procurement are notable since the approach has been initiated by EU and facilitated by the Welsh Government. However, the development of strategic procurement is path-dependent process that may take time to fully develop marking the beginning of a new era for public sector organisations. The transformation of public procurement requires strong leadership and cultural change to shape an open organisational culture and encourage entrepreneurial behaviour. They also acknowledged that despite the size of the authority strategic procurement complex activities are inevitable therefore the development and deployment of high-level procurement capabilities are required. Creation, ownership and deployment of intangible assets such as procurement knowledge and distinct skills, and strategic relationships could be the core of their procurement strategy. Intangibles that are deeply embedded in procurement processes and procedures potentially enable LAs to address current challenges and meet their strategic objectives. This is sufficient because LAs cannot continue to deliver their services pretending nothing has changed. It is not just a matter of delivering the service it is all about going well beyond traditional procurement approaches to meet citizens’ needs and expectations in the current complex environment. Relating to technical capabilities focusing on the performance of a particular task or existing service without reference to their current service demand and rapidly changing environment may lead to their failure to meet even minimum expectations. Technical capabilities are necessary but not sufficient for long-term performance and continuous improvement.

Findings also indicate that a key issue to consider is whether, given current resource constraints, WLAs have sufficient numbers of staff with the right skills even if the right training is being made available. If all councils are to procure at the optimum level, including procuring in the most effective manner for delivering social, economic and environmental objectives, improvement of their procurement skills is essential. This will not only require investment but also cost-effective ways of sharing capabilities if councils are to address their skills shortages at a time of financial constraint. However, findings suggest that some WLAs i.e. CCC1 is currently implementing a strategy that enables the authority to keep procurement staff and also continue developing and deploying procurement professional high-level capabilities. They focus on commercial capabilities, strategic procurement leadership capabilities, procurement analysis capabilities, strategic sourcing capabilities, commercial capabilities, procurement risk
management capabilities, supplier relationship capabilities, contract and supplier management capabilities, cost management capabilities, legislative and policy environment capabilities, and contract law capabilities necessary to address current challenges and enhance overall performance in the long run. Although, this is not a case for small LAs since they lack the capacity to develop and deploy high level procurement capability due to the austerity agenda. It appears that austerity is not the only factor that affects their capacity since the leadership approach and procurement cultural change are other factors that impact their ability to development and deploy such capabilities.

In line with the WG procurement (See policy 7 in Appendix, p. 343) collaboration across councils appears to be an essential aspect of the current procurement approach. Through collaboration WLAs are able to spread best practice on how to maximise their social, economic and environmental impact; to develop streamlined processes to minimise costs and suppliers and potential suppliers; to manage complex contracts securing better value and reduce risks to service delivery and the likelihood of fraud. This also enable them to access the skills and expertise they need particularly to focus on new commercial skills in an increasingly complex procurement landscape.

Findings also indicates that strategic procurement involves an inherently dynamic process, which is more influential in its success than traditional procurement on the continuous adaption to the dynamic and complex environment meeting customers’ needs and technological aspects of provision. Tendering processes including; tendering procedures, specifications, invitation to tendering, terms conditions, law, bid evaluation, negotiation, award of contracts, and debriefing also requires a highly skilled and knowledgeable procurement professional who is familiar and comfortable with all the aspect of procuring processes and tendering procedures. Although, findings suggest that small WLAs lack these depth of capability. Whilst some WLAs have streamlined their processes and are taking a proportionate approach to pre-tender information they require potential suppliers to provide, the default option in too many procurement exercises appears to be to demand excessive information not commensurate with the specific contract needs. Furthermore, suppliers who wish to work with more than one council are frequently required to complete similar complex forms. There is clear scope for more standardisation and simplification across the sector to cut suppliers’ costs and to facilitate the use of community budgets to deliver joined-up local services.
The results of this study also demonstrate that to some extent WLAs are using DCs in practice without knowing since they realised good performance in a complex environment required innovative way of procuring particularly focusing on distinct procurement skills, knowledge management, effective processes and procedures, procurement structure, fit for purpose procurement strategy, strong governance, and strategic leadership. This indicates that Teece’s conceptual framework develop in 2007 could be also applicable in public procurement context. This also indicates that WLAs with strong DCs are likely enhance the overall organisational performance meeting their strategic goals. However, the effectiveness of DCs could be compromised by poor strategy. The ability to sense and seize relates to the mobilisation of procurement skills, expertise and resources, procurement infrastructure, and procurement strategy, namely to capture opportunities and address those procurement opportunities to deliver savings and specifically VFM (See figure 19, p. 214 and 20, p. 223). Whereas, transforming refers to continuous renewal through suitable structure, innovation, knowledge exchanges enhancing the overall performance in a complex and uncertain environment. The greater the diversity and rate of change in WLAs environment, and the greater the importance of strategic activities including suppliers’ relationship – the more critical good procurement strategy and strong DCs become for WLAs performance in the current complex and unpredictable environment. SmallWLAs demonstrates only operational capabilities focusing mainly on operations, administration and governance. In other words they convey ordinary capabilities that enable them to provide the service on a day-to-day basis. Unlike, higher order capabilities or DCs that are sufficient for long-term performance success.

Findings also suggest that strategic conversion of procurement capabilities relies on the ability of procurement managers to build new capabilities and utilize them effectively. These capabilities aligned with strategic and transformational tools, processes, and procedures and other techniques can potentially improve the performance of the whole organisation. The view here is that leadership skills and organisational culture around sensing, seizing and transforming are key factors to sustain strong DCs. In this context the above indicates that the DCs framework developed by Teece (2007) could be used as a general framework for practitioners within LAs to understand the foundations of public sector procurement performance and value creation activities.
WLAs procurement model is shaped by dynamics specific to each particular LA such as distinctive organisational routines i.e. commercial activities, and leadership and organisational culture driving procurement professionals to deal simultaneously with the challenging task of building and managing many types of DCs. Although, for small WLAs this remains challenging since they are mainly focused on repetitive action sequences enabling them to perform efficiently their current procurement activities. The resource constrain is a major barrier. As large LAs are more likely have some spare resources enabling them to develop high order capabilities required to enhance organisational performance in the current environment. However, WLAs despite their size lack DCs that enables them to be more reactive to address the rapidly changing environment and its challenges enhancing flexibly, adaptably, and agility. Although, further research is required to understand in depth the reason(s) why this is happening.
CHAPTER 5: EVALUATION

5.0 INTRODUCTION

The purpose of the chapter is to critically examine the research findings in the light of the existing knowledge of the subject making judgements about the contribution to knowledge and practice. Through the analysis of qualitative data, began to understand how public-sector organisation use dynamic capabilities in terms of strategic conversion building a comprehensive answer to the Central Research Question (CRQ) and Supporting Research Questions (SRQs) below.

Central Research Questions

“How public-sector organisations can use DCs in strategic conversion processes?”

Supporting Research Questions

1. What are the analytical systems and individual capabilities that enable the procurement team to sense, filter, shape and calibrate opportunities?
2. What are current procurement structure, procedures, and incentives to seize opportunities?
3. How does WLAs procurement deliver more with less resources as service demand increase?

5.1 WLAs: Toward strategic approach

Findings indicates that WLAs are confronted with the demand to deliver more with less and become more effective especially given the austerity agenda, the rise in demand for higher quality of service, customer demand and policy changes. Price reduction has become a main focus for some LAs aiming to achieve one of their objectives-good value-for-money (VFM), and to clamp down on discretionary spending. This represents a valuable way to reduce short-term spending but probably is not enough to make lasting changes since short-term thinking could do long-term damage i.e. in achieving savings target LAs are under pressures to reduce numbers of the procurement team which potential has an impact in the long term since they take with them the knowledge and expertise gained leaving a gap behind. As WLAs facing such challenges, procurement teams are attempting to go beyond short-term tactics and take a more proactive and strategic stance within their organisations. This includes, for example
working further upstream in project design and collaborating with the design teams to reduce complexity of process. In this context the role of procurement leaders and professionals becomes essential encouraging new strategic approaches founded upon their ability to use higher-order capabilities known as dynamic capabilities in strategic conversion. Unlike large WLAs this remains challenging for small LAs i.e. NCC and MCC since they are lacking the resources to devote to or develop high-level capabilities. The literature (Pablo et al., 2007; Salge and Vera, 2011) argue that the public sector is facing even more environmental changes that the private sector due to frequent policy changes therefore these capabilities are seen as a vital success factor for PSOs. Bryson et al., (2007) in similar vein, claims that the ability to identify and build capabilities that produce greater public-sector value for strategic stakeholders at a reasonable cost is an essential key to success for PSOs.

WLAs are purposefully setting out a strategic approach that encourages innovation searching for local based abilities or/and competencies that could form the basis of a continual improvement strategy. However, the literature review suggests that this required strong DCs (Teece, 2014). Findings indicate that small WLAs are relaying on repetitive processes completing the day-to-day task which is an indication they focus on operational capabilities or first level order capability (Collin, 1994; Winter, 2003) to secure just in time delivery (Helfat and Winter, 2001) and making a daily living (Pavlou and El Sawy, 2011; Winter, 2003). Although, it could be argued that small LAs are no longer seeking only to ‘earn the living now’ (Andreeva and Chaika, 2006) or ‘doing things right’ (Teece, 2014) but also to enhance their efficiency since “...efficiency is at the heart of ordinary capabilities/operational capabilities” (ibid, p. 330). Findings also suggests that to some extent all WLAs despite their size refer to the ‘best practice’ approach which in the context of the literature review are associated with ordinary or operational capabilities (Easterby-Smith and Prieto, 2008; Schilke, 2014). Strong operational capabilities could be considered when ‘Best practice’ has been achieved (Teece, 2007, p. 2014). Furthermore, small LAs are mainly focused on the performance of their administrative, operational, and governance related functions that are technically necessary to complete the task. Their capabilities are embedded in some sort of “…combinations of skilled personnel, facilities and equipment, standard processes and routines, and administrative coordination” (Teece, 2007, p. 2014). This is another indicator that they mainly using OCs to deliver the service following a standard procurement process.
The selected case studies demonstrate that WLAs are seeking a new strategic approach that enables them to address the dynamics and complexity of the environment confronted with demands to become more entrepreneurial, especially given increasing internal and external environmental pressures. Procurement managers are seeking to develop a novel strategic procurement process referring to the private sector in order to enhance performance. Piening (2013) and Pablo et al., (2007) suggested that the DCs concept holds potential for the public sector and to enhance our limited understanding of how public-sector organisations address environmental changes and enhance performance. In the line with (Palmer and Dunford, 2001; Boyne, 2002; Walker et al., 2002; Damanpour et al., 2009) the implementation of managerial practices and innovation from the private sector could enhance the performance and competition of the public-sector organisation. However, Fernandez and Rainey (2006), Osborne and Brown (2005), and Rashman et al., (2009) argued that the public-sector environment is more complex in the context of management since managers in public sector have to satisfy multiple conflicting goals imposed up on them by numerous stakeholders. Wang and Ahmed, (2007) claim the process in which dynamic capabilities are embedded may be specific to the firm and industry. The essence of DCs is firms’ behavioural orientation in the adaptation, renewal, reconfiguration and recreation of resources, capabilities and core capabilities responding to external change.

The literature claims that PSOs are less flexible and adaptable. Many of them are struggling to adapt to changing market conditions as change initiatives such as the adoption of administrative and technological innovations frequently lose steam in the implementation stage or fail to realize the intended benefits (Borins, 2001; McNulty and Ferlie, 2004; Ridder et al., 2005). As a result, DCs consist of a few simple, often competing, rules and enable highly adaptive behaviour (Galunic and Eisenhardt, 2001).

5.2 The Use of Dynamic Capabilities in Strategic Conversion: Three Clusters of Activities in a Public Sector Procurement Context

Effective public sector procurement management requires the coordination of an array of internal organisational processes, routines and activities (Andrews et al., 2015). DCs refer to the organisation’s internal capability to excel at certain tasks, to continuously reflect and improve, and finally to anticipate and lead transformative change. Teece (2007) claimed that DCs are not about one-off change or transformation, but rather having the processes and
systems in place that represent an ability to continuously manage change and deal with challenges in a systematic and ongoing fashion. Teece et al., (1997, p. 516) claim that DCs represent ‘...the firm’s ability to integrate, build and reconfigure internal and external competencies.” The notion of DCs brings together three key components: innovation; organisational learning and knowledge management.

Findings indicate that the size of the local authority is a determining factor since small local authorities have limited abilities to integrate, build and reconfigure internal and external competencies to address the rapidly changing environment. This is in supportive of Teece’s (2012) claim that smaller firm might lack the organizational and technological slack to repetitively evaluate potential opportunities. As a result they should seek opportunities to collaborate on procurement activities at the widest possible level, internally and externally. This is comparable with the case of CCC2 changed their procurement model and working collaboratively with Pembrokeshire aiming to access the expertise they needed in category management implementation. On the other hand, Pembrokeshire is also benefiting from these changes getting access to the community benefit expertise that CCC2 offers.

In contrast, large LAs demonstrate some level of DCs since they are becoming more commercially focused on innovation and value delivery by changing operational routines (Helfat and Peteraf, 2003; Winter, 2003) “…in pursuit to improve effectiveness” (Zollo and Winter, 2002, p. 340) realising that the orchestration of their resource base and capabilities is essential to enhance the organisational performance and become more innovative (Teece, 2014). Although, Judge et al., (2009) claim that the relationship between organisational capacity for change and firm performance is stronger when there are relatively high levels of uncertainty within the task environment. The organisational capacity for change is an important attribute in all sizes of organisations, not just for large organisations as hypothesized. Alternatively, Biedenbach and Soderholm (2008) state that a dynamic and unpredictable environment requires flexible, innovative, and creative organizations that could easily adapt to the changing environment. DCs are important frequent-change facilitators together with (multi-) project capabilities, capacity to innovate and a project setting of having a flexible organisational form with fluid boundaries. It is the organising processes when all these things come together in a productive way that may create an adaptive and successful organizational approach to change in hypercompetitive environments. The authors suggest that organizational
aspects and capabilities have to go hand in hand as ‘enabler’ and at the same time ‘facilitator’ for a successful emergent change process in hypercompetitive industries.

Alternatively, Eisenhardt and Martin (2000); Zahra et al., (2006); Ambrosini and Bowman, (2009) claim that DCs are path dependent and a prerequisite for long term organisational survival. Findings indicates that WLAs i.e. CCC1, CCC2, and CCC3 are engaging in higher level activities that can enable them to direct their technical activities towards “high-payoff endeavours” (Teece 2014, p. 328) using DCs in strategic conversion to enhance their performance. The approach has echoes of Zollo and Winter’s (2002) claim that DCs are systematic pattern of organizational activity aimed at the generation and adaption of operating routines proposing that they develop through the co-evolution of three mechanisms: (1) tacit accumulation of past experience, (2) knowledge accumulation, and (3) knowledge codification processes. DCs improve effectiveness. On the other hand, Eisenhardt and Martin (2000) claim that DCs include organizational and strategic processes that are a set of specific identifiable processes such as product development, strategic decision-making, and alliances whose strategic value lies in their ability to manipulate resource into a value-creating strategy. Although, idiosyncratic, they exhibit commonalities or ‘best practice’. There are different types of DCs depending on market dynamics. DCs are necessary, but not sufficient conditions for competitive advantage. Teece and Feiler (2014) described three characteristics of DCs; (1) accuracy in volume and risk predictions in investment proposals (the degree to which the subsurface reality is exposed when the well is drilled); (2) strategic deployment of talent into the ventures and projects with the highest economic value (right people, in the right seats, doing the right thing, with the right people, at the right time), and (3) effective management of the centralized-decentralized polarity. Teece (2014) made an explicit statement stating that the foundation of DCs lies within three managerial activities; sensing, sensing and transformation. These activities will be critically evaluated in the following sections to understand these clusters in the public procurement context.

5.2.1 Identification and Assessment of Public Procurement Opportunities: Sensing Activities

From the literature viewpoint a sensing opportunity is an organisational process, which depends on the process of information with specific knowledge and practical wisdom (Teece, 2007; 2014). With reference to pre-procurement activities the core component of DCs is a
sensing capability. The components of DCs have been the focus of various scholars (Pavlou, 2004; Pavlou and El Sawy, 2006; 2011; Teece, 2007; Wang and Ahmed, 2007). Pavlou (2004) focused on three core components of DCs: (1) sensing capability; (2) absorptive capabilities; and (3) innovative capabilities. Similarly, Wang and Ahmed (2007) disaggregated core components of DCs into three clusters: (1) Sensing capabilities; (2) Absorptive/integrative capabilities; and (3) innovative capabilities, however, their focus is on integrative capabilities. Whilst, Teece (2007) states an alternative view. He argued that DCs can be divided in terms of the capacity (1) to “...sense and shape opportunities and threats...,” (2) to “...seize opportunities...”, and (3) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, “reconfiguring” the business enterprise’s “intangible and tangible assets.” (ibid, p. 1319). He suggested that sensing and shaping capacity refers to constantly scanning, shaping, creating, learning, and interpreting activities with regard to opportunities/threats. Alternatively, Wang and Ahmed (2007) identified three main components factors of DCs, namely adaptive capabilities, absorptive capabilities and innovative capabilities and also explained how the three component factors together explain a firm’s mechanisms for linking internal and external resources. The adaptive capabilities share similar attributes to sensing capabilities (Teece, 2007) since it has been depicted “...as a firm’s ability to identify and capitalize on emerging market opportunities.” Wang and Ahmed (2007) depicted adaptive capability as a firm's ability to reconfigure resources and coordinate processes promptly and effectively to meet rapid environmental changes. A common ground with regard to sensing capability is that it is the ability to respond to environmental opportunities/threats on a continuous basis. To address changing environments, there is a need to have the ability to identify/sense those changes, to be able to understand and assess circumstances in order to take the right action. In contrast, Pavlou and El Sawy (2011) identified a set of DCs comprising sensing capabilities, learning capabilities, integrating capabilities, and coordinating capabilities proposing a measurable model to represent the nature of DCs. Their findings suggest that DCs have an indirect positive effect on performance by reconfiguring operational capabilities, and the effect is positively moderated by environment turbulence. Although, the activities related to sensing capabilities have been focus of various scholars i.e. Pavlou and El Sawy (2006) have claimed that understanding customer needs and market dynamics is an essential activity. An early study by Teece and Pisano (1994) depicted the need to be alert to environmental information, disseminate (Kogut and Zander, 1996), and respond to market intelligence.
As discussed in chapter 4 findings also suggest that LAs with large budget available and a cross-functional procurement team embrace high skills, knowledge and expertise more effectively. This is in line with the claim made by Helfat (1997) that organisations with large complementary physical assets and technological knowledge are likely to do better in a changing environment. Although, later on Helfat and Peteraf (2009) claimed DCs are concerned with strategic issues related to firm performance. DCs are not required for capability building and strategic change but to help to understand strategic change by addressing strategic questions: how to sustain a capability-based advantage in the context of environmental change. However, Teece (2007) states DCs enable business enterprises to create, deploy, and protect the intangible assets that support superior long-run business performance. The microfoundations of dynamic capabilities — the distinct skills, processes, procedures, organizational structures, decision rules, and disciplines — which underpin enterprise-level sensing, seizing, and reconfiguring capacities are difficult to develop and deploy. Enterprises with strong DCs are intensely entrepreneurial.

In contrast, small LAs due to the budget reduction and small centralised team often focus only on the operational and repetitive processes to complete day-to-day procurement tasks. From the literature review viewpoint these activities are associated with the ordinary capabilities concerning “administrative, operational, or governance related function that are necessary to complete a currently planned task” (Teece, 2014, p. 342). However, ordinary capabilities are insufficient for long-term survival, except in a very sustainable business environment (Teece, 2007; Drnevich and Kriauciunas, 2011). Nonetheless, DCs by contrast have been depicted as higher-level capabilities, which provide opportunity for knowledge gathering and sharing, continual updating of operational processes, interaction with the environment and decision-making evolution (Easterby-Smith et al., 2009). Winter (2003) claim that DCs could be distinguished from other capabilities: ad hoc problem solving is an alternative to DCs. The concept of DCs is a helpful addition to the tool of strategic analysis, but strategic analysis itself remains a matter of understanding how the idiosyncratic attributes of the individual firm affect its prospect in a particular competitive context. However, Helfat and Winter (2011) claim in a dynamic environment, the line between dynamic and operational capabilities is unavoidably blurry.

However, Drnevich and Kriauciunas (2010) suggest that environmental dynamism negatively affects the contribution of ordinary capabilities and positively affects the contribution of DCs
to relative firm performance. Further, heterogeneity strengthens the contribution of DCs to relative firm performance but is less important for ordinary capabilities. Their findings provided supportive evidence for the direct effects of capabilities to be stronger with a process-level performance measure, whereas the impact of environmental dynamism and heterogeneity are stronger with an organisational-level measure. Castiaux (2012) states DCs are recognized as key factors for the adaptation of the firm to its changing environment. The more LAs integrate environmental considerations in their strategy, the more existing competences, and resources and DCs are questioned. If they want to be successful in environmentally innovative projects, LAs have to develop new DCs integrating environmental dimensions. The more their integration of the environment in their innovation strategy is high, the more DCs, are able to sustain a total transformation of their organisation which is necessary. In particular, firms have to develop competencies to be open to stakeholders, as the evolution toward radical societal changes is systemic and must be supported by all concerned actors.

Another sufficient element that was underlined by participants and illustrated by the case studies are the skills and knowledge of procurement professionals. The key elements on the WLAs agenda providing systematic training opportunities for procurement staff. Some of the top procurement professionals are guided by entrepreneurial logic demonstrating a very broad set of transformational, visioning and influential skills convincing their internal colleagues of the power of procurement and align their suppliers to create a stronger supply chain. This is supportive of Newey, and Zahra’s (2009) study claiming that under conditions of endogenous change, DCs are guided by a proactive entrepreneurial logic and are complementing the need for reactive adaptive responses in circumstances of exogenous change. A key implication is that DCs have a more expansive and critical role in the adaptation of firms than previously considered. Their theory shows how interactions between dynamic and operating capabilities build the adaptive capacity of the organization. Marsh and Stock, (2006) also acknowledge the importance of highly skilled and knowledge retention since the interpretation of activities positively impacts a firm’s overall performance. In particular, practices that enable the retention and interpretation of knowledge improve new product development performance indirectly through the firm’s enhanced ability to apply knowledge developed in prior product development projects to subsequent projects. Practices that enable the interpretation of knowledge in the firm’s current strategic context also improve new product development performance directly. However, Ambrosini et al., (2009) argue that DCs do not automatically link to positive impacts on a firms’ performance (similar to Helfat et al., 2007a). The impact
of DCs may be negative; the DCs may change the resource base but this renewal may not be in line with the competitive environment (similar view to Zahra et al., 2006)

It appears that WLAs are in different maturity stages, although, the role of public procurement is changing from a transactional approach to strategic supply management, where WLAs have a thorough understanding of requirements and the supply market and are able to establish their strategic positions towards collaborative procurement via partnership or shared-services building high-level capabilities known as DC. Strategic procurement provides strong support for moving towards the more advanced stage of supply integration. Understanding the procurement function can play a key role in integrating the buyer-supplier dialogue by focusing on diverse aspects such as process, relational, information, and cross-organizational teams, and can have a profound impact on supply chain performance that subsequently creates a win-win situation for both buyer and suppliers (Paulraj et al., 2006). This is a relatively new concept and is usually associated with the wider discussion of change, focusing on strategies to enable major and long-term improvements to procurement and supply management processes, activities and relationships (Day and Atkinson, 2004).

From the literature review it could be argued that strategic procurement requires innovative strategies leading to development in situations where there is a lot of interaction and collaboration between stakeholders (Holbrook and Wolfe, 2002). Emphasizing on innovative collaboration, sharing best practice and strategies could be a more favourable option for public sector procurement (Uyarra, 2010; Conteh, 2012). However, this are controversial views since many academics suggest that public sector procurement is about co-coordinating activities with other local authorities to optimise results (ibid). Murray and Rentell (2008) suggest that local authority best practice is that a strategy should align with socio-economic goals. However, with the current budget cuts on LAs there could be conflict between short and long-term priorities (Murray, 2009). There is an evidence to support that despite current challenges WLAs are seeking to stimulate innovation through public procurement. While the UK is considered a ‘first mover’ (Edler, 2013; Uyarra, 2013; Uyarra et al., 2013) in the promotion of policies and initiatives seeking to stimulate innovation through public procurement, as well as addressing the modernisation of public procurement more generally (Uyarra et al., 2014).

However, it has become evident that WLAs use DCs in strategic conversion to develop analytical systems and individual capabilities to learn, sense, filter, shape and calibrate
opportunities i.e. processes and tools to conduct supply chain and spend analysis that enable them to gain better intelligence of market structures and suppliers’ strategies as well as identifying potential risks and opportunities and also to understand the impact of procurement and supply on the local authorities. Processes to tap development technology, processes of identify market segmentations, changing customers’ needs, and customer innovation. These elements have been explicitly defined in Chapter 4; Figure 19 (p. 214). Opportunities get detected by the LAs because of two classes of factors. First, LAs can have different access to existing information; Second, new information and new knowledge (exogenous or endogenous) can create opportunity. Findings indicates that WLAs have acknowledged that sensing activities not only involve investment in research activity and the probing and re-probing of citizens’ needs and technological possibility but also involves understanding latent demand, the structural evolution of the public sector and markets, and also supplier responses. This is in support of Teece’s (2007) view claiming that to identify and shape opportunities organisations must constantly scan, search, and explore across technologies and markets, both local and distant.

From the literature perspective when opportunities are first glimpsed, managers must be able to interpret information gathered, events and new development to make an informed decision on which technologies to pursue (Teece, 2007; Kindstrom et al., 2011; Feiler and Teece, 2014). As indicated from findings WLAs are working towards centralised technology based systems like PROACTIS where all LAs could access research information frequently informing their decision-making and also determining their strategic approach to seizing opportunities. Seizing the opportunities requires suitable organization structure, procedures and incentives (Teece, 2007; Feiler and Teece, 2014; Andres et al., 2015) i.e. delineating the customer solution and the business model, selecting decision-making protocols, selecting enterprise boundaries to manage complements and control platforms, build loyalty and commitment and continuous alignment and realignment of tangible and intangible assets. i.e. decentralization and near decomposability, cospecialisation, knowledge management, and governance (See Figure 21, p. 239).

Findings indicate that LAs’ are engaging in procurement strategies that enable a coherent set of analysis, concepts, policies, arguments, and actions that respond to a high-stakes challenge. CCC1 is focusing on commercial aspects of procurement with a particular spotlight on the level
of expertise required for the elements of the role that an individual is expected to perform. The HCP indicated:

“…our main focus is to ensure that procurement practitioners are able to display detailed knowledge of the subject and also are capable to provide guidance and advice to others as well as undertaking commercial activity, based on significant commercial experience and qualifications.”

The participant further added:

“…building procurement expertise ensuring that procurement experts have extensive and substantial skills, experience and knowledge of the subject has become one of the top priorities. It is essential to ensure that they have significant commercial experience and may be at the top of their profession.”

This indicates that the Council is persistent in seeking commercial solutions undertaking successful competition. The evidence suggests that commercial skills were very inconsistent across WLAs in focus reflecting the similar results as the study conducted in 2010 by HM Treasury. Their findings indicate that in the current complex and dynamic environment the outcome of procurement will be influenced by the position on commercial capacity and capability in the organisation. The role of procurement managers/experts is vital leading the development and delivery of a commercial strategy requiring supplier innovation, engagement and market building and shaping. From the literature review perspective the combination of higher order activities known as DCs and a comprehensive strategy codetermine performance (Teece, 2007). The discovery of new market opportunities, involve evolution, assessment, and judgement that are hard to codify, and accordingly difficult to imitate (Teece, 2007; 2014). However, in a public sector context strategies include the priorities of management and values of the authority to give direction of what public services need to be provided (Llewellyn and Tappin, 2003).

The DCs framework advanced by Teece (2014, p. 22) demonstrates links between “...DCs and strategy” however; the effectiveness of DCs could be compromised by poor strategy. He further claims that sensing is important to DCs but also contains a strong element of diagnosis. This is important to strategy; sensing needs to be connected to both a guiding policy and
coherent action; and transforming that to value protecting and enhancing requires a guiding policy and coherent action. In the early DCs framework developed by Teece et al., (1997) considerable emphasis is placed on the replication and limitability of processes and positions if one is interested in sustainable competitive advantage. This could be hard to relate to public sector organisations since these organisations exist to provide service-meeting needs of citizens rather than achieve profit (Collins, 2005). The strategic approach in public sector is to focus on performance rather than CA (Pablo et al., 2007). Using strategies within public sector can help identify the responsibility for obtaining resources and results (Llewellyn and Tappin, 2003). However, Dereli (2003) claims that strategies have to be innovative and adapted to the public processes and procedures. Murray and Rentell (2008) suggest that local authority best practice is that a strategy should align with socio-economic goals. However, with the current budget cuts there could be conflict between short and long-term priorities (Murray, 2009).

Findings suggest that five out six WLAs selected use CM as a strategy approach to enhance their performance and also enable them to address current challenges. O’Brien, (2009) claimed that CM has been seen as an approach that has a start and end point involving a series of circular processes although, the processes has a life cycle, when the maturity of the processes is reached it is necessary to start the process again to respond to the complexity of the environment its constantly changes. This indicates that unlike DCs the CM processes are repetitive and also it appear to be complex in the implementation process. This was echoed by the Local Government Association (2014) affirming that LAs need to strengthen the implementation of the CM since if it could be effectively implemented it can help reduce demand and aggregate spend, achieving bigger results. Although, findings highlights some issues like ‘they say something and they do something else.” i.e. looking back to NCC and PCC procurement strategies where both LAs claim that CM has been successfully fully implemented, however, both representative participants (LPS and SPM4) claimed: “CM has been partly implemented due to capability constraint. It is in our agenda but we not there yet.” Although another participant (SMP3) resonates with the issue stating that:

“For small LAs like ours the implementation of CM is very challenging due to resource constraint and lack of skills, expertise, and procurement capabilities, as a result it has been partly implemented in our procurement...”
This indicates that the key barrier for implementation of CM seems to be a lack of skills and expertise. This indicates the same result as the research conducted eight years ago by Uyarra (2010) claiming that a key barrier to innovation seems to be the lack of appropriate skills and expertise. This means that since then significant changes have not yet been identified in local government procurement. It appears that small LAs are still mainly implementing a standard purchasing approach following the traditional route. Although, procuring innovation is not traditional and therefore they need to initiate new models that enable them to build higher-level capabilities challenging their current traditional approach i.e. as stated in chapter 4 CCC2 has recently introduced a new model “shared service’ working closely with Pembrokeshire implementing collaborative category management solution to drive financial benefits, analysis of needs of various customer segmentation and market, gaining advantage to contract Authority. This was echoed by OGC, (2011) claiming the chosen approach should include the development of market and supplier knowledge, a detailed specification and a force for continuous improvement, which should lead to improvements in performance.

As stated above Section 4.2 defines the public procurement ecosystem for sensing, emphasising on strong elements of the environmental diagnosis that becomes an important input to procurement strategy (See Figure 19, p. 214). From the literature perspective sensing is the first recognized fundamental class of strategic activities, which involves identification, development, co-development, and assessment of opportunities in relation to the needs of customers of an organisation (Teece, 2007; Barreto, 2010). Sensing creates the business ecosystem it is also a valuable opportunity for an organization. Whereas, from the study by Dew et al., (2009), Pandza and Thorpe (2009), it was found that sensing is a combination of prior knowledge, purposeful search and contingencies. This requires an organization to develop a sense of what might be the best possible option around (Kirzner, 2009, p. 151). Whereas, a study by Pavlou and El Sawy (2011) identified three basic routines of the sensing capability (1) disseminating market intelligence (Kogut and Zander, 1996), (2) generating market intelligence (Galunic and Rodan, 1998), and (3) responding to market intelligence (Teece 2007). The development of market intelligence is related to identifying customer needs, being responsive to market trends and exploring the underlying market opportunities (Day, 1994). Recognizing rigidities and detecting resource combination are the key features of the sensing process, which is involved in the strategic conversion process pertaining to procurement in both public and private sectors (Galunic and Rodan 1998). However, in a strategic procurement context, the formulation of a robust strategy requires an understanding of the supply chain and
a comprehensive balanced scorecard as a performance indicator, which allows an organization to evaluate and track changes in performance (Mena et al., 2014).

Table 35 defines the elements of the public procurement ecosystem identifying sensing activities and underlining the significance of the individual capabilities and the outcome or validation. The table also provides an overview on DCs strategic conversions in strategic procurement activities explicating elements of the DCs conceptual framework and shows its relevance to public sector procurement.

<table>
<thead>
<tr>
<th>DCs</th>
<th>Procurement sensing activities</th>
<th>Strategic conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>➢ Environmental analysis</td>
<td>Identify procurement opportunities:</td>
</tr>
<tr>
<td></td>
<td>o Supply chain analysis</td>
<td>➢ Early engagement with current and potential suppliers and stakeholders to understand their needs</td>
</tr>
<tr>
<td></td>
<td>o Supplier and market analysis</td>
<td>➢ Intelligence of market structures and supplier strategies as well as identifying potential risk and opportunities</td>
</tr>
<tr>
<td></td>
<td>o Spend analysis</td>
<td>➢ Identity, prioritise, agreed and document real business needs</td>
</tr>
<tr>
<td></td>
<td>o Process analysis</td>
<td>➢ Conceptualising customer needs</td>
</tr>
<tr>
<td></td>
<td>o Technology analysis</td>
<td>➢ Develop forwards plans, priorities, deliverables and targets for procurement teams and procurement function</td>
</tr>
<tr>
<td></td>
<td>➢ The procurement professionals individual and managerial capabilities- skills and professional knowledge</td>
<td>➢ Develop KPIs review given intelligence act to</td>
</tr>
<tr>
<td></td>
<td>o Procurement expertise</td>
<td>➢ Build procurement professionals capabilities</td>
</tr>
<tr>
<td></td>
<td>o Strategic procurement leadership</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Procurement analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Strategic sourcing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Commercial negotiation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Identify, assess and mitigate procurement risks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Establish long-term relationship with strategic suppliers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Ability to manage contract(s) and cost</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Ability to ensure that delivery of the procurement outcomes is fully consistent with relevant legislation and policy</td>
<td></td>
</tr>
</tbody>
</table>

Leadership and Cultural Change

These findings are supportive to a study by Edler and Gerghious (2007) who depicted that strategic procurement occurs when the demand for certain technology, product or service is
encouraged in order to stimulate a market. Drawing from the literature review perspective the ability to recognise opportunities depends on individual capabilities and their level of knowledge (Teece, 2007). Supply chain analysis requires an understanding of tools, techniques and processes for undertaking the analyses of the supply chain and also using all available sources of information to gather market intelligence. Understanding business needs through establishing effective communications and working relationship with internal customers and key stakeholders. This enables LAs to identity, prioritises, agreed and document real business needs

5.2.2 Mobilisation of Resources to Address Public Procurement Opportunities: Seizing Activities

The information gathered in the sensing phase determines the procurement strategy. Participants’ echoed various approaches, however, a participant (HCP) provided a robust approach. He claimed:

“All information gathered during the pre-procurement phase impacts on our strategic design. To develop an effective procurement strategy it is necessary to start by assessing detail including the objectives, the needs of customers, the availability of resources and suppliers, the budget and the timeline. Through the assessment of these elements, the team involved will be able to start planning for a fit-for-purpose procurement strategy. The important focus here is to make sure that the details of strategy would contribute towards the attaining the LAs established goals and objectives. We have begun to think in a more entrepreneurial way building rather than buying/outsourcing...however, the new way of thinking does not fit with the current culture and leadership.”

This again indicates that changing, for instance, the procurement approach is not enough but needs a combination of various aspects of public procurement such as leadership and culture. LAs needs to act in more entrepreneurial way, changing their closed current culture to an open one that encourage more flexibility and adaptability. Moreover, the issues that LAs may confront are not just when, where and how much to invest but they must also select or create a certain business model, which defines its commercialization strategy and investment priorities (Teece, 2007). However, the participant also indicated that procurement conversion processes should adopt the available opportunities sought with the help of seizing and sensing. Once the opportunities are recognized and have been seized, the transformation of existing operational
capabilities into new ones that better match the environment is essential (Jones et al., 2005; Teece, 2007; Pavlou and El Sawy, 2009).

Similarly, the Chartered Institute of Purchasing and Supply (CIPS, 2012) claimed that a procurement strategy is concerned with identifying, selecting, and implementing the right procurement structure, systems, skills, processes, programmes, shared values, initiatives and objectives for an organisation that add significantly to its goals and profitability. In other words a procurement strategy encompasses a driving of the five building blocks for procurement capability – governance, the organisational influence, people, processes, and technology. Despite the fact that each LA has its own strategy common issues exist. The complexity of public procurement and as a result the procurement strategy scope must widen. This was echoed in the concern expressed by a participant in regarding non-contract activities that might not be well echoed in the procurement strategy. Therefore addressing such aspects could be complex.

“One of the things that we would like to do but resources are an issue is looking at spend on non-contract activity where we’re kind of seeing lots of spend going through in areas that we haven’t got contracts on and then bringing that together to see whether it’s worthwhile looking at an opportunity to actually have a contract in place.”

Although, much has been achieved in the past decade to transform procurement from historically being operational (tactical) to strategic. But the idea of the strategic remains, to some extent, hemmed inside the function, the process of the spend category. Alongside, it requires extensive research to identify the organization’s competitive position, its strengths and weaknesses and the relationship with the supply chain engaging with current and potential suppliers, and with other stakeholders (Barratt and Oke, 2007; Kulp et al., 2004; Müller and Gaudig, 2011). Meanwhile, relationship capabilities are important in the process of developing interpersonal and inter-organizational trust and foster learning across organizational boundaries (Hartmann et al., 2014). Likewise, it has been found that relationship capabilities are complex routines, policies, and procedures in inter-organizational relationship. Dyer and Singh (1998) argued that it is very important to invest in developing relationships-specific assets, combine complimentary, knowledge exchange but that as early evidenced in this thesis scarce resources effectively govern their relationships. On the other hand, Hartmann et al.
(2010; 2014) in accordance with the study of Carey et al., (2011) asserted that contractual governance mechanisms such as monitoring and controlling systems are complimented by relational mechanisms. The relational mechanisms in the procurement processes and in sensing practices allow the development of trust and cognitive alignment to promote problem solving and knowledge exchange. Similar to the early study by Daniel and Wilson (2003) the development and deployment of different types of capabilities to build commitment to change both within the organisations and within external stakeholders and the organisational ability to integrate processes into existing activities are essential in each clusters of DCs. This was also echoed by Teece (2007) asserting that risk will be greater of organisations sticking to the same standard processes and procedure. He further stated that “the existences of layer upon layer of standard procedures; established capabilities, complementary assets, and/or administrative routines can exacerbate decision-making biases against innovation” (ibid, p. 1327)

The above explicates the DCs framework and shows its relevance to public sector procurement context. The procurement strategic decision and strategic conversion of DCs in context of seizing activities are summarised in Table 36. The procurement strategic decision activities are drawn from Chapter 4; Figure 20 (p. 222). The strategic conversion elements emerged from the critical evaluation of findings in relation to literature review Chapter 2.

<table>
<thead>
<tr>
<th>DCs</th>
<th>Procurement strategic decision activities</th>
<th>Strategic conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seizing</td>
<td>Strategy formation and implementation</td>
<td>Design fit-for-purpose procurement and value creation strategy</td>
</tr>
<tr>
<td></td>
<td>Capability building</td>
<td>Develop new procurement model – know how</td>
</tr>
<tr>
<td></td>
<td>Design and refine:</td>
<td>Build new procurement competencies achieving a new combination</td>
</tr>
<tr>
<td></td>
<td>o Procurement model</td>
<td>Build new higher-order capabilities that better much the environment</td>
</tr>
<tr>
<td></td>
<td>o Tender specification/processes and contract award</td>
<td>Build long-term relationship with strategic suppliers</td>
</tr>
<tr>
<td></td>
<td>Market and supply development</td>
<td>Knowledge sharing</td>
</tr>
</tbody>
</table>

### 5.2.3 Continued Improvement: Transformation Activities

Drawing for the literature review Teece (2007) stated that once opportunities are recognised and have been seized, transforming DCs are needed to achieve continuous improvement and
organisational reviewal. The transforming activities including processes, content, and capabilities and have a potential to substantially affect its long term prospects (Agarwal and Helfat, 2009). In the context of public procurement transformation of procurement capabilities impact current processes enhancing their performance and enabling a positive response to rapidly changing environments. In a strategic procurement context, similar to private sector transformation capabilities are embedded in processes that align procurement strategy with overall organisational strategy and different business units (Mena et al., 2014). The transformation of existing operational capabilities has been the focus of other studies. Pavlou and El Sawy (2009) assert that the ability of a public sector organisation to transformation its operational capabilities into a new one to much the environment is significant.

The current environment is characterised by an increase in demand for service, budget restriction, frequent changes in the competitive environment, rapid technological advances and increasing regulatory requirement, among other factors that place ongoing pressure on WLAs to regularly transform as a matter of survival. In this context all participants acknowledged the importance of strategic focus and strategic capabilities indicating that they lack such capabilities. A participants (DNPS) claimed:

“I do acknowledge that WLAs are aware of the need for change and procurement improvement practice across the sector and that some councils are ahead in procurement transformation adapting commissioning approaches which deliver savings to local communities. However, the main enablers for such transformation is our culture and leadership. My concern is that more need to be done and that not all are procuring so as to achieve maximum value for money. Councils must ensure that they have appropriate mechanisms in place to enable them to measure the cost and savings of their procurement exercises so that they can evaluate the extent to which they are using optimum approaches.”

Another participant (HP) claimed:

“Our strategic capabilities comprise the unique combination of abilities that make the procurement team good at what it does and differentiates it from other WLAs procurement organizations. They reflect the unique way in which we learned to effectively combine and integrate people-relate skills and expertise with other
assets such technology, procurement systems and processes. These must continually evolve and develop in line with the Council’s strategy and objectives in order to drive effective procurement transformation and overall performance.”

Although, in principle all participants from WLAs acknowledged that the strategic focus of WLAs, which propels it forward, is the deep-rooted understanding of what they do and why they do it. They also indicated that the ability to properly define the organisation’s transformation capabilities is important in order to drive significant change in ways that LAs can achieve and sustain their optimal positioning for service performance. Two participants representing NPS further echoed these transformational capabilities are dynamic factors which reflect the current and expected future state of the external environment, and guide how the environment should be modified to ensure that public sector organizations are able to respond to demand.

Findings also suggest that for successful procurement transformation WLAs are engaging in managerial activities that can make capabilities dynamic i.e. LAs are implementing CM as a vehicle to transform public procurement generating higher savings, improving suppliers’ performance, mitigating supply risks, and driving innovation and continues improvement. This being supported by one key participant (HCP) claiming that despite the fact that the view an approach towards CM holds opposing views among LAs the participant (HCP) provided a comprehensive steps and activities that contributed to the successful implementation of CM including;

1. Use of detailed analysis and hard data to determine procurement priorities and targets
2. Creation of the transformation program built around category management
3. Restructuring procurement around categories
4. Develop capabilities in CM
5. Installing strong project/program management
6. Driving change through cross functional team
7. Embedding strong governance and reporting arrangements
8. Building ownership by the business for the program outcome
9. Securing senior management buy-in

He further added that
“CM is about driving wholesale change in procurement, but this was successful when the wider organization changed together with it. Senior management buy-in was crucial and a lot of the success depended upon educating and training and also finding the balance between tactical and strategic activities.”

This indicates that successful transformation involves a continued focus on the organisation’s fundamental purpose and core values, while changing the way these are pursued in response to current changes driven by internal and external environmental factors.

Another participant (HP) claimed:

“Transformational capabilities, within the public procurement context are restricted due to the complexity of the sector. Our focus is mainly on two inter-related factors contributing to effective transformation: first, the fundamental purpose of the procurement and second, core values. Although, they both are static factors used to form the guiding principles that determine the desired ultimate destination and how to reach it, in broad terms.”

Drawing from the literature this indicates that the transforming aspect of DCs is needed mostly when radical changes and opportunities need to be addressed (Easterby-Smith, and Prieto, 2007; Teece, 2012). Although, an early study by Jas and Skelcher (2005) highlighted leadership capabilities as essential factor that drives transformation. Whilst, Andres et al., (2015) identified two main higher order capabilities as driving factors towards transformation; low structure complexity and consistency in staffing. Although, all these studies find links between DCs in transformational mode and knowledge management. They identified learning processes as a common theme underlying both dynamic capability and knowledge management. The study also recognised that knowledge management and dynamic capabilities lead to a better performance when they support operational functioning of the firm. They further acknowledged that knowledge management enabled DCs and are antecedent of specific operational functional competences that in turn have a significant effect on business performance.

In summary, the main points discussed above are summarised in Table 37. The procurement activities are drawn from Chapter 4; Figure 21 (p. 239) defining the transformational activities
in context of WLAs. The strategic conversion overview drawn upon the main points discussed in the evaluation chapter. The table indicates that leadership and cultural alternation are two significant factors that drive continuous improvement and transformation of public sector procurement. Findings explicitly indicate that the leadership role of WG for public procurement has been significant for many years. Most LAs have engaged positively with WG implementing programmes i.e. e-procurement and policies and all are committed to take this forward. However, WLAs are also considering their options for moving forward without WG involvement due to issues regarding the continuous support and funding reductions. WG has lead in the development of new and innovative policies; for which procurement can be a powerful enabler. This enabling capability needs to be deployed in order to realise the benefits of these new policies and support public service reforms. However, these policies may not always fit within the dynamics of the environment therefore this study suggest that static leadership and a closed culture needs changing into a more dynamic and responsive one, enhancing the speed of public procurement transformation.

<table>
<thead>
<tr>
<th>DCs Clusters</th>
<th>Procurement activities</th>
<th>Strategic conversion</th>
</tr>
</thead>
</table>
| Transforming | Procurement Structure: | Achieving continuous improvement-
|              | o Decentralisation     | recombination of assets and managing
|              | o Centralisation       | threats.              |
|              | Governance             | Strategic focus       |
|              | Knowledge management and knowledge exchange | Development of Strategic capabilities |
|              | Continues innovative and collaborative procurement | Leadership capabilities |
|              | Supply and contract management | Cultural alternation capabilities |
|              | Build higher order capabilities | Realigning governance capabilities that drive behaviour towards achieving the procurement objectives of government |
|              |                        | Collaboration         |
|              |                        | Achieve perfection    |

Table 37: Foundations of Dynamic Capabilities for Public Sector Procurement Transformation

5.3 Emerging Themes: Transformational Leadership and Internal and External Cultural Change

Drawing from the above critical evaluation of findings in relation to the literature review two emerging themes have been identified; (1) Transformational leadership and (2) cultural change (internally and externally). This means that the study appears to support the argument for a change in leadership and organisational culture. These findings are consistent with previous research (Jas and Skelcher, 2005; Pablou et al., 2007; Teece and Feiler, 2014; Teece, 2017)
demonstrating that DCs do not simply emerge or represent what firms do well; rather they are identified and built through the intentional effort of leaders and managers who configure, orchestrate and sustain clusters of activity to enhance overall performance. DCs were identified and prioritized through strategic assessment, built through dialogue, collaborative and iterative processes that were informed by learning, were sustained through the establishment of an organisational structure and leadership that provides systematic oversight and training, and were reinforced by leadership and culture. Teece (2012) assert that transformational leadership challenges the notion that all DCs can be reduced to firm-specific routines as some scholars have suggested (Eisenhardt and Martin, 2000; Feldman and Pentland, 2003; Zollo and Winter, 2002).

Shuen et al., (2014) claim DCs are a meta-process that involves orchestration and leadership across a cluster-resource, processes, and best practice managing comprehensively and systematically. This is seen as strategically critical. DCs differ from ordinary capabilities in that they orchestrate clusters of ordinary capabilities, best practices and competencies to gain competitive and performance advantages capturing opportunities and managing strategic risks. All the aforementioned factors have a close relationship with the theory of leadership and culture of an organization, whether both these factors support the transformation process in the area of procurement or not. Moreover, the leaders having more concern and intent regarding organisational transformation develop a culture of learning, innovation; creativity that translates their strategic direction for betterment, survival and competitiveness.

Procurement leadership has been the focus of various reports i.e. Beecham et al., (2006); McClelland (2006; 2012); Simpson Review (2011); Williams (2014) and KPMG (2014). The Simpson Review (2011) examined how greater collaboration between the 22 LAs in Wales could be achieved with the role of the leadership as one of the key principles. Leadership and culture has more scope when it comes to bringing transformation in the public procurement processes. Whereas, McClelland (2006; 2012) claimed strong leadership of the ‘functional’ activity of professional procurement can provide benefits across the wide span of the organisation. He recommended that the procurement leadership role should extend to those activities associated with functional excellence including staff communications, education and training, staff development, career path, job grading, salary scale and when appropriate workload balance. Furthermore, he asserts, more had to be done for the development of a
transformation culture and transformational leadership to affect the bottom-line. In addition, managerial vision and good leadership are seen as vital in any organization.

The William’s Report (2014, p. 52) made a clear statement “There needs to be step change in leadership and culture in Welsh public services if outcomes for citizens are to be improved.” The economic and demand challenges that public-sector leaders are currently facing and will continue to face are unprecedented. These challenges required leadership and cultural changes enabling transformation in both levels: operational and strategic. Change and improvement could be delivered through collaborative work and collective responsibilities, from political, executive and transformational leaders and from staff at all levels. In such a dynamic environment it is essential to be flexible and creative to mobilise the organisational resource base to make these changes real. The report further asserts transformational leaders and culture alternation are essential in driving and sustaining high standards of governance, delivery and performance.

Transformational leadership is a process of engagement between the follower and the leader, which enhances the level of motivation and performance (Northouse, 2013). To achieve this, the leader needs to shape and create an open organisational culture that motivates followers to reach their full potential. This is analogous to a win-win relationship, which should be the main objective of the supplier relationship. Mena et al., (2014) examined how leading companies have implemented transformational leadership to impact suppliers’ relationships, and ultimately drive CA. They draw on three key factors: first, idealised influence; second, inspirational motivation; and third, intellectual stimulation. Northouse (2013) identified these factors and used them to define transformational leadership. In the context of this study transformational leadership and cultural alternation are significant enablers of the public procurement dynamic capabilities microfoundations that were added to the original framework developed by Teece (2007) to show its relevance to public sector procurement context.

5.4 Review of Teece’s Model

This study aimed to investigate DCs in strategic procurement activities to assess how LAs use DCs in strategic conversion processes using Teece’s (2007) conceptual framework to analyse the foundation of DCs in public procurement context. The above indicates that DCs concept seek to explain how LAs could enhance their overall performance through strategic procurement in dynamic environment. Findings explore the DCs framework (Teece, 2007) and
shows its relevance for public sector procurement suggesting that strategic conversion of highest-order capabilities involved in three strategic management processes; sensing, seizing and transforming enable some LAs i.e. CCC1 to create, develop, and project higher order capabilities that support superior long-term performance.

DCs in general are associated with processes that change an organisation’s resource-base (Collins, 1994; Helfat, 1997; Eisenhardt and Martin, 2000; Zollo and Winter, 2002; Winter, 2003; Zahra et al., 2006; Wang and Ahmed, 2007; Helfat et al., 2007). It is consider consistent in studies on strategic management mainly in private sector, and are associated with organisational changes, effectiveness, and performance improvement in dynamic and complex environment (Teece and Pisano 1994; Teece et al., 1997; Helfat and Rauditschek, 2000; Zollo and Winter, 2002; Teece, 2007; Wang and Ahmed 2007; Teece 2009). Nevertheless, the definition of microfoundations – distinct skills, processes, procedures, organisational structure, decision rules, and disciplines is too broad and required more specification in regards to its ability to allow the application of the DCs with particular focus on those capabilities involved in three managerial activities: sensing, seizing and transforming (Teece, 2007) that represent an attempt to operationalise it through public sector procurement routines and processes. Therefore this study reviewed the original framework to contextualise the microfoundations of public procurement.

Figure 22 disseminates the concept of DCs in public sector procurement context, which encompasses the capacity of WLAs to sense, seize opportunities and to manage threats and transformation. Microfoundations in red/italic have emerged from primary data analysis. Two significant themes discussed in section 5.3 have also emerged transformational leadership and cultural change adding to theoretical development. The first capability proposed by Teece (2007) is the capability to continually analyse the environmental contexts attempting to spot opportunities (sensing). In this context, WLAs have prioritised the development of new and effective processes and individual capabilities to enable frequent and effective spend and process analysis, observation and analysis of local and national supply chain to tap suppliers and innovative solutions, to identify and tap new developments in technology with an intention to upgrade the current one, and to identify customers’ needs and customer innovation.
Figure 22: The Foundation of Strategic Procurement Dynamic Capabilities in Public Sector Organisation. Source: Teece (2007, p. 49) Revised by the Author.
The second DC proposed by Teece (2007) is the capability to seize or and incorporate opportunities. Seizing is associated with the development of new products, procedures, services and new business models aligning capabilities required to create organisational frameworks guiding the process of seizing opportunities. The development of seizing capability depends on the stage of consolidation of the previous capability (sensing). It is possible to claim that in the context of WLAs seizing activities have proven more challenging than the previous one (sensing) since this requires higher order capabilities that contribute to the design and refinement of a procurement strategy that is fit for purpose and a procurement model that improves the outcome. Although, data indicates that the most challenging part is the implementation of a procurement strategy and new procurement models due to the lack of key procurement capabilities. The ongoing business need is for a robust procurement function for Wales, that all WLAs can use, enabling them to manage procurement opportunities and risk effectively enhancing the quality of service. It is possible to claim that the findings indicate that this need has not yet been met and that much of the good progress made through various initiatives has been undone. This demonstrates that public procurement needs to enhance their ability to seize and incorporate opportunities in order to address needs and current challenges and foster the creation of a futuristic procurement model and strategies with in a clear procurement vision and objectives alongside the structure, processes, and procedures identified in Figure 22.

Teece (2007) asserted that once an organisation senses opportunities and has a clear strategy to seize these opportunities, it is necessary to develop another higher level capability set (transformational) that enables continuous improvement and transformation of public procurement operational capabilities and resources. The transformational capabilities refers to a set of managerial activities that continuously align and realign specific resources (Teece 2007). Figure 22 provides an overview of the microfoundations that underpin managerial and organisational processes in a public procurement context. However, findings indicates that the transforming process remain challenging for LAs due to their static/bureaucratic nature, lacking flexibility and adaptability Findings also demonstrates that the new microfoundation would be justified by the need for a new leadership style and internal/external cultural change that encourages the development of transformation capabilities that are sufficient at this stage. This is supportive to all participants view including NPS which plays a leadership role in delivering collaborative procurement using standardised approaches and specifications. Although, LAs currently facing challenges in delivering collaborative procurement solutions
acknowledging the great difficulty in meeting the needs of all LAs. This has also been recognised by the Wales Audit Office (2018).

In summary, three clusters of DCs: sensing, seizing and transforming that are embedded in managerial and organisational processes and their microfoundations defined by Teece (2007) can be also associated with the managerial and organisational processes mainly in large LAs indicating that DCs hold potential for public sector organisations. However, the conceptual framework has been revised with an intention to contextualise DCs in strategic public sector procurement. The framework that emerged holds potential to guide public sector procurement managers to align and realign their processes and procedures alongside the resources, operational capabilities, and DCs to achieve long-run superior performance in the current complex environment.

5.5 Conclusion

The discussion of research findings in relation to existing literature indicates that Teece’s (2007) conceptual framework is applicable in a public sector procurement context. Figure 22 shows the microfoundations of DCs in public procurement context. Findings are consistent with previous research demonstrating that public sector procurement benefit from having DCs (Lee, 2001; David and Wilson, 2003; Carmely and Tishler, 2004; Jones et al., 2005; Jas and Skelcher, 2005; Ridder et al., 2005; Vera and Crossan, 2005; Pablou et al., 2007; Ridder et al., 2007; Willson and Daniel, 2007; Easterby-Smith et al., 2008; Piening, 2011). DCs reflect management’s ability to assess, build, and reconfigure internal and external resources to address and shape a changing environment (Teece et al., 1997; Teece, 2009). Sensing, seizing and transforming are highest – order capabilities that aggregate and direct the various ordinary capabilities and the second order dynamic capabilities (Teece, 2007; 2009; 2014; and 2017). The top order capabilities are those that on which top managers are mostly focussed. They are associated with innovation, and selection of business models that address the problems and opportunities the organisation is endeavouring to solve/explore (Teece, 2017).
CHAPTER 6: CONCLUSION AND CONTRIBUTIONS

6.0 INTRODUCTION

This chapter reviews and reflects on the aim, objectives, research questions and main findings of the study. It also draws together the conclusions, which are formed into sections that detail the significant contributions to knowledge in terms of theory, methodology and practice.

For future research recommendations are made for the strategic public-sector management field, which build on the knowledge and insights generated by the study. The limitations of this study and opportunities for future research are discussed in the subsequent sections. The chapter and indeed thesis ends with a personal reflection on the study to give an experiential insight to the life cycle of the research process.

6.1 Review of the Aim, Objectives

The aim objectives, and CRQ and SRQs, outlined in Chapter 1 are reviewed herein. Reflecting on the research outcomes, it can be concluded that the study was a success as the aim, objectives, CRQ and SRQs were comprehensively achieved. Though, to support this claim it is necessary to examine how these were achieved and clearly demonstrate the contributions made.

Aim
The aim of this study was to “Investigate DCs in strategic procurement activities in order to assess how LAs potentially use DCs in the strategic conversion process”

Objectives
1. To develop a conceptual understanding of the DCs building the bridge between DC and public procurement approaches.
2. To identify case studies reflecting the various strategic approaches towards procurement.
3. To investigate how WLAs scan the internal and external environment to spot opportunities and make decision about strategic direction - assessing sensing activities in public sector procurement.
4. To explore their strategic approach on building the ecosystem readiness to capture those opportunities- identify seizing activities.
5. To how WLAs continuing to transform the service delivering ‘more with less’ - identifying transformation capabilities.
6. To build the typology of DCs in public sector procurement.

Reflecting on the research outcome, it could be concluded that the study was a success as the aim and objectives were comprehensively achieved. The following section will demonstrate how these where achieved and defines the contribution made.

Findings indicate that the lack of higher – order capabilities and expertise in procurement is evident. Procurement has a low profile in particularly a small WLAs, limiting the ability of their procurement professionals to make strategic decisions, engage with the market and ensure fall compliance with guidelines and strategic decisions within their organisation. Decentralised procurement settings are characteristic of the WLAs, meaning that many procurement decisions are taken without involvement or even knowledge of the procurement professionals. Besides a poor use of procurement skills, which could be employed to promote advanced procurement and innovation, additional shortcomings include poor internal communications, lack of compliance and inconsistent standards. A combination of the capability of procurers and commissioners to fully comprehend the business and needs of the organisation and to articulate those needs to suppliers competently with a view to procuring the best solutions remain challenging. Translating this into DCs context one could argue WLAs lack “intelligent customer” capabilities. Limited resources in procurement any way would mean it is difficult to change.

However, findings also indicate that the impetus for the procurement function in light of austerity is providing opportunity and impetus to becoming more strategic. As all of the respondents have shown that the maturity stage and strategic approach is highly important for the procurement processes. Procurement conversion depends upon the enforcement of different tactical, transformational, and strategic, instruments and techniques and can effectively influence many areas. The areas to be influenced by such procurement conversion include cost control, sustaining, extending, and renewing cost management and initiating new business forms. This implies that the conversion or change in the procurement processes is directing the organisation to effectively maximise the utilisation of its resources. On the other hand, cultural...
change is generally the major barrier for procurement transformation as it takes a long time to develop and success has to be visible and well communicated with new norms and values backed with incentives. These findings are consistent with previous research on PP i.e. Beecham et al., (2006); McClelland (2012); Williams (2014); KPMG (2014). This indicates that advanced and strategic procurement is an essential factor that requires distinct skills, robust processes and procedures, flexible organisational structure and decision-making rules which underpin procurement strategic activities –sensing, seizing, and transforming. This enables the development of strong market and supplier knowledge, a deep understanding of specification and demand, a strong focus on competition, and a drive for continuous improvement – all of which lead to overall performance improvement and better VFM.

The study offers suggestive evidence that a strategic approach to public procurement management requires comprehensive analytical systems providing frequent improved data influencing decision-making and individual capabilities to learn and sense, filter, shape, and calibrate procurement opportunities. Therefore, processes to tap supplier and citizen innovation and changing expectation, to tap development in technology and public policy and to identify key citizens’ needs and key challenges have become a top priority for public-sector management. This requires the orchestration of internal capabilities to address challenges caused by rapidly changing (external and internal) environments. This involves the development of a procurement strategy that fits within the organisation. This strategy that should clearly articulate procurement’s vision, mission, and goals, provide comprehensive guidance on systems and procedures, and encourages learning and development of procurement professionals and most importantly enables continuous improvement. However, findings demonstrated some conflicting views since LAs are developing procurement strategies that enable them to achieve VFM based on WG policy while on the other hand making procurement staff redundant.

Findings also suggest that mergers between small procurement teams could be a strong factor for developing improved collaborative procurement and creating synergy. The case of CCC1 and CCC3 suggest that mid to large size LAs are inclined to continue investing in procurement capabilities, leadership and development of cross-functional procurement teams. It could be argued that this is based on their ability to better organise and coordinate external spend to improve leverage in contracting and negotiation and to form a better-orchestrated supply base. On the other hand small LAs are seeking to build alliances or develop a merger strategy to get
access to skills and expertise they need which results in changing their procurement model. i.e. CCC2 and Pembrokeshire is a classic example that demonstrates that merger between small procurement teams could potentially lead to a greater outcome. Working collaboratively with the Pembrokeshire enhanced CCC2s ability to fully implement CM approach benefiting from their knowledge and expertise in this area. On the other hand the Pembrokeshire team has benefited from CCC2’s expertise in its ‘community benefit’ policy.

Findings demonstrate that LAs are using DCs in strategic conversion to enable them to address current challenges and enhance organisational performance. The unstable and turbulent economic and political environment, austerity agenda, increases in demand, innovations, and technology require the development of a robust procurement strategic approach that enables LAs to be actively involved in sensing, seizing and transforming strategic activities to have a good understanding of the supply chain and to have KPIs that allow them to evaluate and track changes in performance. Findings suggest that change management is a complex set of activities, which is based on complex analytical, cultural, and political processes of changing and challenging core values, beliefs, strategy, policy and structure of an organization.

Findings indicate that radical change is needed for the public sector in Wales to survive in a sustainable and viable form particularly concentrating on their strategic approach since the problems found are systems, values and processes in the public sector, as it stands (Beecham et al., 2006; McClelland, 2012; William, 2014; KPMG, 2014). LAs are required to build high order capabilities, which could enable them to drive innovation through public procurement and contracting (Uyarra and Kieron, 2009; Uyarra et al., 2014). Innovation in procurement is capable of producing three main benefits: first, it could result in a procurement problem being resolved in a more effective and creative way; second, it could lead to better VFM for the tax payer; and third it could stimulate Welsh enterprises to generate new products and ideas that will, in turn, lead to economic growth, often based on scientific research into commercial products and services (House of Lords Report, 2011).

Some of the WLAs purposefully are involved in higher-level activities embracing innovation and becoming more proactive, recognising that their boundaries need to constantly change in response to citizens’ needs with the compliance of legislation and WG policy. Large WLAs show responsiveness and a more flexible innovative approach towards procurement. Simultaneously, this demands extensive coordination efforts and the rearrangement of internal
and external capabilities as an ongoing activity (Teece et al., 1997). This shows the increasing importance of procurement innovation to enhance organisational performance, which is at its highest magnitude in turbulent environments (Biedenbach and Soderholm, 2008). Capabilities are, however, not necessary easy to change especially for small LAs where the breadth and depth of capability and particularly resilience is a real challenging. Teece et al., (1997) suggest that organisations’ inherent capabilities hold an element of change and constant reconfiguration as well. From a dynamic perspective, being able to achieve successful and constant changes and innovation is a core capability or a core competency in itself (Voelkel et al., 2004; 2005)

The degree and the role of DCs in public sector procurement require further research since findings indicates that LAs lack DCs particularly in transformational activities where the role of leadership and internal and external cultural changes is essential. These findings run counter to the conventional view that leadership and culture are two essential enablers (McClelland, 2012; Williams, 2014; KPMG, 2014).

The thesis was based on six objectives: First, to develop a comprehensive literature review following a unique approach, of building a bridge between DCs and public procurement approaches. This objective was achieved through a review of contemporary and traditional literature that supported the topics covered in this thesis (Chapter 2); Second, to identify appropriate case studies that created an interesting composition in term of strategic approaches towards procurement and the capability base. To achieve the objective six out of 22 WLAs were selected based in comprehensive criteria being established (See section 3.7 and 3.7.1; Table 23, p. 143) following the similar approach developed by Yin (2013) and Gary (2014); Third, to investigate how Welsh Local Authorities (WLAs) scan the internal and external environment, calibrate opportunities and make decision about strategic direction. This objective also was successfully achieved by mapping higher order public sector procurement sensing activities where DCs are embedded (See section 4.2.1; Figure 19, p. 214); Fourth, to explore the strategic approach of WLAs on building the ecosystem ready to capture procurement opportunities. In order to achieve the objective, the researcher strived to identify seizing activities that could help in the procurement process strategic conversion related to the procurement requirements of the authorities studied (See section 4.2.2; Figure 20, p. 223); Fifth, to understand how WLAs can continue to deliver ‘more with less’ focusing on procurement transformation. Following the same approach the researcher identified and mapped relevant activities intending to understand how they use transformation capabilities in
strategic conversion (See section 4.2.3; Figure 21, p. 239); and six, to build a typology of DCs in public sector procurement, which was achieved. The research framework has been developed (See Figure 23, p. 280) keeping in view the findings and outcomes from the literature.

6.2 Contribution to Knowledge

One of the major contributions of this study is that it is the first attempt to apply dynamic capabilities (DCs): sensing, seizing and transforming in the context of strategic public procurement activities drawing upon Teece’s (2007) framework ‘Explicating Dynamic Capabilities”. Although, several previous studies i.e. (Lee, 2001; Carmeli and Tishler, 2004; Ridder et al., 2005; Jones et al., 2005; Vera and Crossan, 2005; Pablou et al., 2007; Klein et al., 2011) applied DCs in a public sector context to understand the impact of DCs in public sector organisations but none of these studies focused on public procurement. The studies show that PSOs benefit from having DCs through reshaping capabilities (Jones et al., 2005), knowledge sharing capabilities (Lee, 2001), or managerial capabilities (Carmeli and Tishler, 2004) and operational capabilities (Ridder et al., 2007; Guimaraes et al., 2011). These studies also identified attributes of DCs in public sector organizations. Daniel and Wilson (2003) analyse the nature and development of DCs claiming that all organisations including government agencies reconfigure and extend their resource bases by developing different DCs. They suggest that learning- by- doing is the primary mechanism through which organizations build dynamic as well as operational capabilities. Cross-functional teams support capability building. Whilst, Carmeli and Tishler (2004) claimed that intangible resources such as human capital, organizational culture and managerial capabilities especially, in a turbulent economic environment that impacts the performance of WLAs. Jas and Skelcher (2005) focused their research on 15 poorly performing English LAs to examine the relationship between performance decline and turnaround. Their findings indicate that LAs fail to initiate organizational restructuring when they are not aware of their poor performance or lack leadership capabilities. They argue that DCs reside in a small band of senior politicians and managers that could be able to take appropriate actions when the organisation faces signs of performance decline. Two years later Pablou et al., (2007) analyses how public managers use DCs to improve performance drawing attention to the processes of developing and implementing DCs. They suggested that this process occurs in three overlapping phases: the identification of DCs and a supportive leadership style to encourage personal initiative and
trusting relationships while managing ongoing tensions. Ridder et al., (2007) also made an interesting discovery claiming that the ability of an organisation to develop new operational capabilities or reconfigure existing capabilities depends on its evolutionary path and distinctive dynamic capabilities referring to learning and coordination processes.

Section 1.0.4 and the literature review (Chapter 2) indicate that the studies underlining procurement capabilities are very limited (Ancarranin and Zsidisin, 2010). The researcher has identified only four studies (Ordanini and Rubera, 2008; Hartmann et al., 2010; Spring and Araujo, 2014; Flynn and Davis, 2016) that investigate procurement capabilities, however, none of them investigated procurement capabilities from a DC’s perspective.

6.2.1 Theoretical contribution

This study offers a number of important theoretical contributions to two main strands of literature, which are the DCs literature and literature on PSP. The contributions to both literature strands are conceptual, addressing the lack of systemic and consistent theory development in the strategic public sector procurement literature and lack of a comprehensive analytical framework for the study of contextual factors for DCs. Provided the limited understanding of strategic conversions of DCs in SPP context, this work offers a more holistic and multi-dimensional perspective to the study of DCs, from which a number of theoretical implications can be drawn.

The literature review in Chapter 2 clearly indicates a gap in the literature since only three studies identified looked at DCs in a procurement context, Li (2013) and Hartmann et al., (2014). Li (2013) discussed broadly the concept in public procurement context. Whilst, Roehrich, Frederiksen, and Davies (2014) look at it in the context of private sector procurement, aiming to examine the change in the interactions between buyers and suppliers, the emergence of value-creation and capability development during the transition process. This thesis filled the gap in the literature by extending DC theory into public sector procurement to understand the nature and use of DCs in public procurement. In addition, this contribute is not only on the theoretical development but also has implication for practice since the procurement paradigm is gradually shifting from the traditional, administrative and transactional to strategic (Tassabehji and Moorhouse, 2008; Mena et al., 2014; Ndrecaj and Ringwald, 2015; White et al., 2016; Ndrecaj, 2016).
Despite almost two decades of research on the DCs concept, it still remains as topical as ever (Wang and Ahmed, 2007; Barreto, 2010; Teece, 2014). This study extends DCs theory into public sector procurement demonstrating the potential of DCs theory in public sector procurement. The key theoretical contribution is the review of the conceptual framework developed by Teece (2007) known as “Microfoundation of Enterprise Performance” drawing upon a tripartite taxonomy of sensing, seizing, and transforming creating microfoundations of DCs in a strategic public procurement. In other words, the theoretical contribution of this study consists of three main elements: extend DCs theoretical conceptualisation in the field of public procurement management; indicate new theoretical linkages between DCs that has become a prevalent theoretical approach in private sector and strategic public procurement activities that have rich potential for theory and further research in strategic public procurement; and provide clear implications of DCs theory towards dynamic and complex environment and organisational performance. This study emphasises the notion of advanced knowledge and moving the field’s thinking forward, providing new connections among previous studies. It has put Teece’s DCs microfoundations framework in procurement context becoming a significant part of the ‘Research Revised Conceptual Framework’ (See Figure 23, p. 282). Elements in red/italic define the theoretical contribution of the study.

This study suggest that procurement in the public sector is not strategic in form – strategic procurement is only something that the public sector has recently embraced. The traditional approach to procurement management represent one end of the spectrum where organisational culture and leadership maybe seen as lacking dynamism. The findings indicate that this approach requires low order capabilities associated with ordinary capabilities (OCs) following the ‘best practice’ approach serving the organisations basic needs processing orders, chasing suppliers, negotiating deals to achieve the cost reduction. This means that the left side of the model represent the bureaucratic version of procurement as an oppose to strategic approach fully integrated to within the organisational strategic planning (See Figure 23). The research revised conceptual framework demonstrates that traditional procurement is characterised by a focus on serving the LAs basic needs for materials or services. The main activities are repetitive in nature processing orders, chasing suppliers, negotiating deals and achieving cost reduction or savings and decision has a short – term impact. Pressures are centred mainly on increasing savings and the potential contribution of procurement to
Figure 23: The Research Revised Conceptual Framework
effectiveness of local authorities is very limited. Drawing upon the research findings small local authorities provide some training for procurement personal indicating limited emphasis in professional development and procurement recognition.

While at the another end we have a strategic approach that recognises that procurement is the gateway to the supply base, which can drive superior performance bringing innovation, quality, technology, and access to new markets being a significant oversight function with a much more dynamic and entrepreneurial culture and leadership. In this sense procurement is seen as a strategic function within itself with associated microfoundations to deliver on the organisation’s increasingly challenging environment. The strategic approach required high level capabilities based on professionalism, high technical competence, transformational and leadership skills, with continuous development attracting top talent. This research suggest that LAs with strong DCs are performing better in the current environment due to their ability to involve in strategic activities; sensing, seizing and transforming connecting organisational strategy with day-to-day procurement operation. The research findings determined the typology of strategic procurement activities; sensing, seizing and transforming shown in Figure 23. However, it is important to highlight that the typology of the procurement DCs represent a limited generalisation. The contextual factors, such as; size of the local authority, leadership style, organisational culture, power balanced with customers and suppliers and the overall economic situation, might affect the role, approach, and influence procurement could have in performance of a public sector organisation.

This study also demonstrates that DCs has not yet been applied much outside the private sector used as an organizing framework to understand how to build sustainable competitive advantage (i.e. the durability of profitability that is associated with long term survival and growth). The framework is applicable, however, to the public sector. To do so, one must decide what is the nature of the relevant environment (is it the electorate or particular interest groups including politicians themselves?). That’s because if the unit of analysis is the public agency, long run survival requires keeping the relevant constituencies happy, and in particular those that provide funding to the agency. In today’s austerity agenda it is about balancing the budget which trying to deliver the best services possible.

It’s probably more satisfying to take a higher-level view, and to accept that LAs (at least in a representative democracy) should be thinking about serving the public interest. In a properly
functioning system it ought to be the foundation for survival. Once one adopts this perspective, then it can be seen that LAs need both OC (technical competencies supporting technical efficiency) and DCs (putting scarce public resources to their highest and best use). The former might be supported by shared services and other economising activities. Dynamic capabilities are likely to be manifested when the LAs get their priorities right since OCs are about doing things right (“efficiency”); DCs are about doing the right things; and they frequently involve “new combinations”.

With respect to procurement, interesting points include following best practices (experience shows that “ordinary” often isn’t done well at all) but dynamic issues would include what should one try to procure externally versus do without. Thus health services may be busy trying to figure out how to buy prescription pharmaceuticals more cheaply while the real issue might be how one should use more preventative medicine, thereby reducing the need for prescription pharmaceutical products taking a holistic view. Likewise, rather than focusing on how to buy police cars cheaper; are there GPS technologies which can help one figure out optimal police positioning, possibly reducing the number of cars and police officers needed. Achieving such change is likely to require interagency cooperation (“new combinations”) and the ability to execute (“sensing”), not just talk.

This raises the question of how DCs can best help the public sector. There is no doubt in the researchers mind that few WLAs have strong DCs. New futuristic model where WLAs are run more like businesses has a higher chance of developing and deploying DCs in part because of the latitude that leaders of these authorities have, and because there are clearly objectives/metrics set to measure their performance.

**6.2.2 Empirical Contribution**

The study provides empirical evidence of DCs in public sector procurement using a samples of six WLAs. In doing so, this study helps to overcome the lack of empirical grounding of the DCs field. This contributes to strategic management of public sector literature by disaggregating strategic procurement activities in three clusters of DCs sensing, seizing, and transforming. There are very few studies on public procurement capabilities (Ordanini and Rubera, 2008; Hartmann et al., 2010; Spring and Araujo, 2014; Flynn and Davis, 2016) in-depth discussed in sections 1.0.4 and 6.2 and those that do exist concentrate on various
procurement capabilities rather than dynamic capabilities and what it offers to public procurement. WLAs are currently seeking a new strategic approach towards strategic procurement, to address the austerity agenda discussed in Chapter 1 and enhance their performance. The data that has been gathered for this study presents an important contribution to knowledge of the strategic use of DCs in public procurement, particularly in line with the seminal work, DCs theory goes beyond a traditional approach claiming that the performance of public procurement lies on the organizational capability to sense and shape opportunities and threats, to seize opportunities, and to transform the procurement as needed, each of them supported by individual capabilities, structure, specific processes and systems. This is consistent with previous research particularly Teece’s view. The study has confirmed that small procurement teams find it challenging to use DCs in strategic conversion due to a lack of capability. As a result a shared service model have been introduced in LAs as a new approach to collaborative procurement gaining access to the skills, knowledge, and expertise needed. The study reveals two emerging themes: transformational leadership and internal and external cultural change as essential factors that influence the development and deployment of dynamic capabilities as a result of organisational performance.

**6.2.3 Practical Contribution**

This study enhances our knowledge of how WLAs use DCs in strategic public procurement with particular focus on sensing, seizing and transforming activities. The research finding provides guidelines for managers, particularly in the LAs studied for effective analysis, strategic planning and execution of their procurement strategic activities. In other words the study provides insights on the application of the DCs framework that enable them to analyse procurement processes and routines underpinning procurement capabilities (Teece, 2007; 2009). This study provides procurement managers with a useful tool to have a better understanding of individual capabilities, distinct skills, systems, processes, procedures, and structures that underpin microfoundations of procurement dynamic capabilities. The framework allows flexibility to continually review the microfoundations base and it is easy to use. Section 5.4 demonstrates the application of DCs in practice where Teece’s (2007) original framework was reviewed aligning procurement microfoundations that could be used for strategic procurement managers as a model to guide them on sensing, seizing, and transforming activities achieving superior performance in the long-term in the current volatile environment.
The DCs allows LAs to adapt to and to shape their environment (Teece et al., 1997; Eisenhardt and Martin, 2000; Wang and Ahmed, 2007; Helfat et al., 2007). Sensing and shaping opportunities are important processes as are individual capabilities, which allow procurement teams in LAs to maintain and improve their fit with their environment (Teece, 2007). In particular, procurement processes which tap technology innovation and engage with suppliers from an early stage, to identify market needs together with the analytical systems i.e. spend analysis, supplier and market analysis; process analysis and technology analysis to shape and calibrate opportunities support taking DC forward. So the procurement teams could be effectively engaging in environmental scanning and exploration to detect opportunities.

Seizing procurement opportunities relies on the organisation’s ability to address an opportunity that has been detected (Teece, 2007). This requires capability building, ability to design a strategy ‘fit for purpose’, provide comprehensive guidance i.e. tender processes and awards and market and supplier development. Teece (2007) claimed that the ability to make a strategic decision on the approach to new technology and business model are essential. Sensing activities can also happen on various scales given the flexibility to choose the approach that is suitable for the LA. i.e. rather than implementing a major change or investment they could focus on the key DCs which includes knowledge leverage to look for new approaches(s) to exploit the existing in house knowledge and resource base (Wang and Ahmed, 2007), using existing knowledge in different way.

Finally, findings suggest that WLAs despite their size lack transformation capabilities that facilitate continuous alignment and realignment of resources particularly their limited ability to constantly implement the seized opportunities as is well evidenced. Rather than being proactively part of innovation is expand it, they demonstrate a lack of such capabilities and also a capability gap on contract and supplier management aspects. This study demonstrates that particular sets of DCs are more useful for a specific task than others. Therefore, it is challenging for LAs to find the right balance of DCs. Although, a key practical implication is that DCs cannot be bought in markets but have to be built in-house through experience accumulation (Teece et al., 1997; Teece, 2007; 2009). Public procurement managers can encourage the development of DCs by effective resource allocation and learning activities (training and development programmes) creating the open culture that enables knowledge sharing (Makadok, 2001; Zollo and Winter, 2002).
However, bringing the research into practice contains critical issues such as the nature, role and consequences of the dynamic environment (Easterby-Smith et al., 2009, Peteraf et al., 2013). The nature of DC is ability/capability and an organisation's behavioural orientation (Eisenhardt and Martin, 2000), which differs from organisation to organisation. Every organisation possesses different levels of capabilities and the potential, experience and expertise to implement those capabilities in practice. The original framework has faced some condemnation i.e. Nonetheless, Arend and Bromiley (2009) identified four factors that limit the potential of the framework: first, unclear value added to existing conceptions; second, lack of consistent theoretical foundation; third, weak empirical support; and fourth, unclear practical implication of the DCs. In contrast, the two influential schools Helfat et al., (2007) and Teece (2007) have put more attention towards the implication of the practice of DCs.

Furthermore, this study calls for more attention to be paid to the relationship between the wider governing bodies set-up and the nature of interactions and capabilities of organisations for innovation. The level of cooperation and communication in fostering open dialogue and interactive learning between important stakeholders in the decision-making process (users, procurer, and suppliers) has been repeatedly emphasised as significant determinants of successful procurement processes (Edler et al., 2015). The benefit of stakeholder interaction particularly lies in facilitating more frequent and faster flow of information and integration of perspectives to not only overcome resistance but also to achieve a more holistic decision-making process. It is therefore important to understand the various contextual factors which influence the level of collaboration before further exploring the impact on innovation adoption. In this research, two areas of policy recommendations are presented: first, building procurement competencies and stakeholder interaction and secondly, improving the flexibility of procurement procedures for the adoption of innovative technologies. The literature particularly highlights the importance of inter-departmental collaboration within organisations to facilitate the exchange of ideas, knowledge and experience within an organisation (Lee, 2001; Pablo et al., 2007). The ability to do so was deemed as particularly significant for the procurement process in effectively communicating and translating needs or problems into functional specifications to the supplier. However, the findings of this research show that the level of participation of different stakeholders and decision-making levels within and outside an organization was highly dependent on the wider institutional incentive structures within which an organisation operates.
6.3 Limitation of Study

Like most research, this work has a number of limitations which need to be taken into account, which can be summarised into three main points.

*First*, the key limitation of this research is related to the generalisability of the findings, owning to the qualitative case study research design applied in this study. Despite the many positive aspects of qualitative research, such as studying the phenomenon within its real live context as applied in this research, studies continue to be criticised for a lack of generalisability and objectivity. This was particularly related to the nature of small samples, rendering the generalisations of conclusions more difficult (Yin, 2004). The number of participants was 11, all senior procurement experts including two from National Procurement Service (NPS) who are involved in national strategic aspects of public procurement in Wales. The number of participants was a limiting factor since the researcher would liked to have included procurement professionals in operational level to get full insights. Consequently, limited number of participants determined the research method. The research method employed is fundamentally based on a flexible qualitative research paradigm. The researcher was primarily seeking non-numerical forms of data (Walsh and Wigens, 2003; Henn et al., 2006). Quantitative research was the only suitable method to be employed combined with a multiple case study strategy providing in-depth data. The methodological implication of this study is that public management research should continue to use in-depth qualitative data to delve into the microfoundations of DCs in a public sector context. This is consistent with previous views i.e. Piening (2014) and Ambrosini and Bowman (2009). However, a combination of qualitative and quantitative methods might lead to better results i.e. in order to enhance the understanding how DCs impact the performance in PSOs linking qualitative process data with quantitative outcome data seems to be a promising approach.

*Second*, only 6 out of 22 WLAs were selected which represents a relatively small proportion of population less than 30%. The findings may have a different result when applied to all WLA and another country context so that further research is suggested. Generalisability has been defined as the degree to which findings are generalizable beyond the sample population of the study (Maxwell, 1992; 2010). As discussed in the methodology Chapter 3, this research attempted to address this problem through applying a multi-case study approach, leveraging the generalisability of findings. However, one can distinguish between different types of
generalisability, referring to (1) the representation of findings in proportion to the study’s population, (2) the ability to infer and apply the findings to other settings and 3) theoretical generalisations (Lewis and Ritchie, 2003). The use of multiple case studies has contributed to a better replicability of the research findings, yet does not compare to the potential of quantitative statistical generalisability (Yin, 2004). The strongest type of generalisability supported in this study is the theoretical replication, through the application of a broader analysis with the help of the conceptual framework applied. Meanwhile, the review of Teece’s framework (Figure 22) and the new model emerged (Figure 23) are developed in context of the limited number of WLAs. Although, inevitably further research is needed to generalise the research findings and test the model in wider public sector.

**Third,** the primary data collection technique employed was semi-structured interview. This was also a limiting factor since an observation technique was desirable but due to the lack of ability to secure access the technique has not been employed.

The above limitations did not prevent the research aim and objectives being met but it does by all means reduce the ability to capture additional value and lead to the next need for further studies.

### 6.4 Future Research

Some concepts and theoretical perspectives drawn from the literature review to underpin the framework in this study are still empirically underdeveloped. Especially both the distinction and operationalisation of three clusters of DC: sensing, seizing and transforming originally developed by Teece (2007). Therefore the empirical application of this framework has proven an ambitious and challenging task in public sector research since the operationalisation of the various dimensions was relatively weakly supported in the public sector literature. Despite these challenges this study has attempted to operationalise the framework within the rich data set of contextualised case studies. As one of the early application of this framework in procurement context, this study was able to create a microfoundations of public sector procurement delineating various dimensions. Yet providing only an initial effort, the contribution should be considered as open-ended rather than conclusive, signalling the importance for the future research tailoring the operationalisation and distinction of three
dimensions of DCs. Hence, based on the exploratory nature of the topic, this research offers three avenues for further research.

First, future work on DCs in public procurement strategic activities can contribute to both the public strategic management literature and to ongoing debate in strategic management about the nature, functioning and explanatory value of DCs (Piening, 2014). DCs have been mainly studied in highly dynamic industries. This study shares the same views as Easterby-Smith et al., 2009) and Barreto (2010) suggesting that research in an other context, most notably the public sector, is necessary to provide a more comprehensive picture of these capabilities. Further research should seek to determine how one could distinguish between procurement ordinary and dynamic capabilities to have a better understanding of the nature of DCs in a procurement context, which needs further amplification, and solid empirical grounding (Pablou et al., 2007; Ambrosini and Bowman, 2009). Likewise, this research provides a useful starting point to investigate the role of transformational leadership and cultural change in strategic conversion of the public procurement DCs. However, given the limited scope of this study further research is needed to deepen our understanding of DCs in the context of public procurement practice. The literature is silent on which capabilities and managerial processes should be designed to innovate and transform procurement from a traditional to a strategic position that connects organizational strategy with day-to-day operations (Mena et al., 2014). This further research could also investigate the role of DCs in advancing the maturity stage of public sector procurement.

Second, based in the issues of generalisation, further research could benefit by exploring the phenomenon within wider LA contexts. This could be done in two different way: (1) widening the scope of analysis to other public sector organisations through empirically applying the conceptual framework in an exploratory manner. The framework particularly offers a potential platform for analysis for different institutional context such as different public sector bodies. This will feed in to the limitation of the research in furthering the understanding and operationalisation of the DCs particularly microfoundations framework and encourage wider use across sectors and organisations; and (2) the study only proposed an initial attempt in empirical integration multiple higher level capabilities (microfoundations) adoption and will benefit from further application and adaption. It is encouraged to examine microfoundations with larger samples as well as longer time frames which will help further test and strengthen the replication of findings of future research. Furthermore, the research might further benefit
from longitudinal ethnographic research design as a means of better explore the underlying principles of these microfoundations in relation to different organisational departments. An ethnographic research design will in particular help to further operationalise and explore the relationship between the two themes which emerged from this study: transformational leadership and cultural change and other microfoundations that underpin transforming activities.

Thirdly, this study was primary limited to the study of DCs in relation to strategic public procurement, however the topic proves much wider in scope. Further research may consider exploring common microfoundations and unique microfoundation in different areas of public sector, such as exploring the role of DCs in ‘triggering’ long-term performance to understand the conditions for better articulation of long-term performance and how to best develop and harness higher order capabilities of private sector.

**6.5 Personal Reflection**

Undertaking this study has been an invaluable experience. I realised that learning through the part-time PhD programme was a very different process to my other postgraduate learning experiences. It was a long and often lonely process, perhaps even more so for a part-time student. It is full of thoughts it is one that has been immensely rewarding, enlightening and fulfilling. However, on a personal level I found very challenging balancing the PhD level studies, family, and full-time lecturing job. I started the journey in February 2013 together with two well-known experts in the fields Prof. Andrew Thomas became my Director of Studies and Dr. Kathryn Ringwald was my supervisor. As this study progressed so did my career. Building on my previous research experience I was appointed a Research Assistant at the Procurement Best Practice Academy, University of South Wales being involved in various research projects focusing on public sector procurement developing research skills and also enhancing my understanding of the research process from the topic formulation, to the establishment of comprehensive aim (s) and objectives, literature review, research methodology, findings, and conclusion and most importantly this experience augmented my research by exposing me to the public sector procurement spectrum. Welsh Government to influence their strategy towards procurement transformation commissioned these projects. In June 2013 I joined the academic team as a Lecturer at Supply Chain Management Department. The combination of
reinvigorated support, the full-time involvement in an academic environment and my family have been key factors in bringing this project to completion.

In the context of learning, similar to many early stages PhD researchers, I was somewhat uncertain and took time to focus my studies and understand what a PhD actually was (Phillips and Pugh, 2007). This was perhaps exacerbated as a part-time student and full-time practitioner. However, as a mature student and experienced researcher, I knew that my philosophy of learning was interpretivism. The entire experience has enabled me to develop a different approach in how I think and analyse and most importantly gain in-depth knowledge of the concept of dynamic capabilities and public-sector procurement. The PhD was not linear and I often felt in the space somewhere between the known and unknown particularly on the research process and public-sector procurement field due to the ontological limitation.

The main challenge was the approach towards two philosophical stands: Epistemology and Ontology and works out how they fitted to this study. Despite the fact that I realised that the epistemological and ontological aspects were developing perhaps at different rates and sometime in different direction sometimes conflicting each other causing some internal conflicting thoughts and adding to the complexity of the PhD experience. However, this seems to be a common challenge for PhD students i.e. Batchelor and Napoli (2006, p. 16) claimed that “Research is not usually a straightforward linear process. There are some days when you move forward and other days when you move backwards”. They further elaborated in that there is so much information which cause conflicting thoughts, however, this is common throughout PhD studies. This experience also has further enhanced my understanding of the nature of the research process and supervision.

I have learned i.e. things do not fit neatly and that research could be frustrating and sometimes tedious, yet at other times immensely rewarding and even exhilarating. I was unfortunate to change DOS and supervisor twice due to the factors beyond my control, the DOS left the university and almost in the same time the supervisor decided to take early retirement creating for me a turbulent learning environment and slow down the progress of the PhD. As a result four months later I had a new team with Professor Martin Rhisiart as a DOS and Dr. Gareth White as supervisor. This did not stopped here since a year later Dr. White decided to leave the team as a result Professor Hugh Coombs joined the team. I still remember how happy I was since I thought this is it, the end of the journey that was full ups and downs. But I was wrong.
since Prof Rhisiart suddenly passed away in July 2017 to be replaced with Prof Hefin Rowlands. Despite all, I acknowledged that without the support and guidance from my supervisory team I wouldn’t have been able to have completed the project.

However, different feedback from different supervisors, uncertainty on what constitute a tradition path to part-time PhD and pressures to present the research in various relevant international conferences at the times did impact my confidence. Although, this was transformed into positive aspects as I was taking the lead becoming more comfortable in what I knew and what I did not. Different views expressed by supervisors made me realise and acknowledge the value of different perspectives, and being able to make decision choosing valuable aspects that strengthen my thesis.

Similarly, conference feedback i.e. IPSERA conference in 2014 and PhD Doctoral Conference organised by Nottingham University in 2014 was used as a mechanism for learning. This was a good opportunity for my work to be evaluated and critiqued by international procurement experts and academic. The important aspect of this journey was for me to understand absolute ‘truths’, however, I realised and accepted that absolute truth doesn’t exist - the scholarly in both fields of the study have expressed their views therefore I had an opportunity to create yet another unique example engaging on this debate. Blass, Jasman, and Levy (2012) clarifies that if there are any absolute truth, rights or givens, they are a few and far between, difficult to find and even harder to recognise when found. This is a fundamental part of the PhD development however, I have not found any yet.

As Hannibal in 218BC informed his generals when told elephants could not cross-mountains, “aut viam invenian aut faciam” - I’ll either find a way or make one, and I did (Knox 1922, p 27). I am proud of this submission, as I believe it makes a valuable contribution. It has likely been my biggest challenge to date. Undoubtedly, there will be many more but I am thankful for the knowledge, skills and resolve that I have gained as the experience will serve me well.
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Wales Procurement Policy Statement

**Definition of Procurement:** This policy adopts the Sustainable Procurement Task Force definition of procurement:

> “the process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimising damage to the environment”.

The Principles of Welsh Public Procurement Policy

In carrying out procurement activity the public sector in Wales are required to adopt the following policy principles:

1. **Strategic** - Procurement should be recognised and managed as a strategic corporate function that organises and understands expenditure; influencing early planning and service design and involved in decision making to support delivery of overarching objectives.

How will this be achieved?
Welsh Government will:

- Set out a ‘maturity model’, against which development of procurement can be measured across the Welsh public sector.
- Facilitate a Procurement Fitness Check Programme, to include a self-assessment model for eligible organisations.
- Provide a standard template against which public bodies will report the outcome and progress against action plans.
- Provide access to policy, advice and resources which enable public bodies to improve procurement outcomes.

The Welsh public sector will:

- Measure themselves against the maturity model, by undertaking an annual Procurement Fitness Check and reporting the recommendations and action plan progress to Welsh Government.

2. Professionally resourced – procurement expenditure should be subject to an appropriate level of professional involvement and influence, adopting the initial benchmark of a minimum of one procurement professional per £10m of expenditure across the wider public sector.

How will this be achieved?

<table>
<thead>
<tr>
<th>Welsh Government will:</th>
<th>The Welsh public sector will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote adoption of a procurement competency framework setting out qualifications, experience and expertise that will support a structured procurement career.</td>
<td>Ensure adequate skills and resources are in place to carry out effective procurement and contract management.</td>
</tr>
<tr>
<td>Provide routes to training and development, including those which enable public bodies to cultivate professional procurement and commercial expertise.</td>
<td>where gaps are identified within organisations, consider opportunities to share expertise across organisational boundaries.</td>
</tr>
<tr>
<td>Drive forward the shared services programme, enabling public bodies to utilise resources to best effect.</td>
<td>Have a procurement training strategy which addresses resource and skills gaps and share this with Welsh Government to support future skills development strategy.</td>
</tr>
<tr>
<td></td>
<td>Incentivise procurement officers to maintain their continuous professional development and maintain their CIPS License to Practice, including CIPS Ethics Module</td>
</tr>
</tbody>
</table>

3. Economic, Social and Environmental Impact - Value for Money should be considered as the optimum combination of whole-of-life costs in terms of not only generating efficiency savings and good quality outcomes for the organisation, but also benefit to society, the economy, and the environment, both now and in the future.

How will this be achieved?

<table>
<thead>
<tr>
<th>Welsh Government will:</th>
<th>The Welsh public sector will:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Provide leadership on procurement best practice</td>
</tr>
</tbody>
</table>
4. Community Benefits – delivery of social, economic and environmental benefit through effective application of Community Benefits policy must be an integral consideration in procurement. How will this be achieved?

<table>
<thead>
<tr>
<th>Welsh Government will:</th>
<th>The Welsh public sector will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• provide Community Benefits policy; strengthening support available on the ground and challenging the application</td>
<td>• appoint a community benefits champion for their organisation and advise Welsh Government</td>
</tr>
<tr>
<td></td>
<td>• apply a Community Benefits approach to all public sector procurements</td>
</tr>
<tr>
<td></td>
<td>• Apply the Measurement Tool to all such contracts over £1m, as a minimum.</td>
</tr>
<tr>
<td></td>
<td>• Provide justification for all contracts valued above £1m where the approach has not been used</td>
</tr>
</tbody>
</table>

5. Open, accessible competition – public bodies should adopt risk based, proportionate approaches to procurement to ensure that contract opportunities are open to all and smaller, local suppliers are not precluded from winning contracts individually, as consortia, or through roles within the supply chain.

How will this be achieved?
Welsh Government will:
- provide www.sell2wales.co.uk, including the SQuID common question set.
- Provide Leadership, guidance & tools on best practice procurement approaches
- Improve information on forward programmes by maintaining publication of the Wales Infrastructure Investment Plan.

The Welsh public sector will:
- Amend standing orders to require advertisement of all contracts over £25k on www.sell2wales.gov.uk.
- Proactively publish their forward contract programmes on their website
- Use appropriate ‘lotting’ strategies.
- Apply the SQuID approach as standard to supplier selection.
- Publish contract award notices on www.sell2wales.gov.uk
- Ensure procurements are available and accessible to all - including collaborative bids (i.e. consortia)
- Promote fair payment terms throughout the supply chain

6. **Simplified Standard Processes** – procurement processes should be open and transparent and based on standard approaches and use of common systems that appropriately minimise complexity, cost, timescales and requirements for suppliers.

How will this be achieved?

<table>
<thead>
<tr>
<th>Welsh Government will:</th>
<th>The Welsh public sector will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop and promote simplified approaches to procurement based upon the adoption of common systems and processes, including the Welsh e-procurement service, that reduce the cost of doing business.</td>
<td>Adopt and embed common procurement approaches.</td>
</tr>
<tr>
<td>Provide a centrally funding a 2 year change programme to accelerate etrading</td>
<td>Make best use of available e-procurement tools</td>
</tr>
<tr>
<td>Monitor the adoption and impact of these approaches.</td>
<td>measure themselves against the eProcurement Maturity model and eProcurement Organisational Benefits models part of the annual procurement fitness check process</td>
</tr>
<tr>
<td>Provide structured support to public bodies to undertake business change management to support effective utilisation of e-procurement</td>
<td>Encourage supplier feedback on ease of process and channel through to Welsh Government</td>
</tr>
<tr>
<td>Provide a single point of contact for supplier feedback</td>
<td>Pay all correct invoices on time</td>
</tr>
<tr>
<td></td>
<td>Use Project Bank Accounts where appropriate</td>
</tr>
<tr>
<td></td>
<td>Adopt a ‘no purchase order no payment’ policy for all procurement activity</td>
</tr>
</tbody>
</table>
7. **Collaboration** – areas of common expenditure should be addressed collectively using standardised approaches and specifications managed by the National Procurement Service (NPS) to reduce duplication, to get the best response from the market, to embed the principles of this Policy Statement for the benefit of Wales; and to share resources and expertise.

How will this be achieved?

<table>
<thead>
<tr>
<th>Welsh Government will:</th>
<th>The Welsh public sector will:</th>
</tr>
</thead>
</table>
| • Deliver collaborative contracts and frameworks through National Procurement Service to the value of 2.2bn over the next 2 years.  
• Support collaboration and the wider shared services agenda. | • Participate in the National Procurement Service for the benefit of Wales and their individual organisation.  
• Consider opportunities for further collaborative procurement initiatives  
• monitor and report on engagement with NPS and other collaborative initiatives |

8. **Supplier Engagement and Innovation** – dialogue with suppliers should be improved to help get the best response from the market place, to inform and educate suppliers, and to deliver optimum value for money.

How will this be achieved?

<table>
<thead>
<tr>
<th>Welsh Government will:</th>
<th>The Welsh public sector will:</th>
</tr>
</thead>
</table>
| • Provide clear policy direction on procurement best practice in support of public bodies in Wales adopting approaches to procurement that are informed and influenced by feedback from the supply chain.  
• Provide business support to suppliers through the Business Wales service | • Publish a single electronic point of contact for supply chain dialogue/feedback/ adequate tender feedback.  
• use outcome based specifications where appropriate to encourage business innovation  
• use pre market engagement where appropriate  
• Regularly publish contract award notices  
• consider opportunities for using new innovation partnership provision of the Public Contract Regulations  
• ensure regular contract performance management reviews are conducted and use these to encourage two-way dialogue |
9. **Policy Development and Implementation** – deployment of policy which supports the achievement of the seven well-being goals for Wales as set out in the Well-being of Future Generations (Wales) Act (2015)

<table>
<thead>
<tr>
<th>Welsh Government will:</th>
<th>The Welsh public sector will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Consult with social partners and other relevant stakeholders on matters which may be influenced through public procurement policy.</td>
<td>• Deploy the procurement guidance issued in all relevant contracts.</td>
</tr>
<tr>
<td>• Utilise the general designation on procurement to issue procurement guidance in the form of regulatory requirements for the Welsh public sector</td>
<td></td>
</tr>
</tbody>
</table>

10. **Measurement and Impact** – in accordance with good management practice, procurement performance and outcomes should be monitored to support continuous improvement, and examples of good and poor practice openly shared.

How will this be achieved?

<table>
<thead>
<tr>
<th>Welsh Government will:</th>
<th>The Welsh public sector will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide a standard framework of procurement measures that are proportionate and demonstrate engagement with the WPPS.</td>
<td>• Complete an annual return to Welsh Government of procurement outcomes, achieved through procurement.</td>
</tr>
<tr>
<td>• Collate information and report to the Minister for Finance &amp; Government Business and Procurement Board for consideration in future policy development implementation.</td>
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</table>

**MEASURES**

Principle 10 of the WPPS commits the Welsh Government and the Welsh public sector to work collaboratively in the preparation and delivery of an annual return to measure adoption of the WPPS in Procurement activity across Wales. Table 1 identifies the scope of measurement.

Table 1
<table>
<thead>
<tr>
<th>Theme</th>
<th>WPPS Principle Link</th>
<th>Policy Link</th>
<th>Adoption Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource &amp; capability</td>
<td>1, 2, 7, 9</td>
<td>- Welsh public sector Procurement Maturity Matrix - Procurement Training</td>
<td>• Procurement fitness check level • Level of professional procurement intervention • Evidence of commitment to continuous professional development</td>
</tr>
<tr>
<td>Economic Impact</td>
<td>3, 4, 5, 6, 7, 8, 9, 10</td>
<td>- Sustainability Tools - E procurement service - Community Benefits - Joint Bidding Guide - Ethical Procurement Advice Notes - Supplier Qualification Information Database (SQuID)</td>
<td>• Savings from influenceable procurement spend • Engagement with Welsh Business • Delivery of Community Benefits • Engagement with collaborative contracts and service provision • Adoption of e procurement systems • Adoption of low value advertising • Publication of contract award notices • Adoption of a proportionate, risk based approach • Use of the SRA</td>
</tr>
<tr>
<td>Social Impact</td>
<td>3, 4, 8, 9, 10</td>
<td>- Sustainability Tools - Sell2Wales - Community Benefits - Wales Infrastructure Investment Plan - Joint Bidding Guide - Ethical Procurement Advice Notes</td>
<td>• Engagement with ethical procurement policies • Engagement with Welsh Business • Delivery of Community Benefits • Engagement with social enterprises, including supported factories • Use of the SRA</td>
</tr>
<tr>
<td>Environmental Impact</td>
<td>3, 4, 8, 9</td>
<td>- Sustainability Tools - E procurement service - Sell2Wales - Community Benefits</td>
<td>• Environmental impact of influenceable procurement spend • Delivery of Community Benefits • Adoption of e procurement systems • Use of the SRA</td>
</tr>
</tbody>
</table>
Table 1: Local Authorities in Wales that use PROACTIS Spend Control and eProcurement solutions: Source: [www.proactis.com](http://www.proactis.com)

<p>| | |</p>
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<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Blaenau Gwent County Borough Council</td>
</tr>
<tr>
<td>2</td>
<td>Bridgend County Borough Council</td>
</tr>
<tr>
<td>3</td>
<td>Caerphilly County Borough Council</td>
</tr>
<tr>
<td>4</td>
<td>City &amp; County of Cardiff</td>
</tr>
<tr>
<td>5</td>
<td>Carmarthenshire County Council</td>
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<tr>
<td>6</td>
<td>Ceredigion County Council</td>
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<tr>
<td>7</td>
<td>Merthyr Tydfil County Borough Council</td>
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<tr>
<td>8</td>
<td>Monmouthshire County Council</td>
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<tr>
<td>9</td>
<td>Neath Port Talbot County Borough Council</td>
</tr>
<tr>
<td>10</td>
<td>City and County of Newport</td>
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<tr>
<td>11</td>
<td>Pembrokeshire County Council</td>
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<tr>
<td>12</td>
<td>Powys County Council</td>
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<tr>
<td>13</td>
<td>Rhondda Cynon Taf County Borough Council</td>
</tr>
<tr>
<td>14</td>
<td>City and County of Swansea</td>
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<tr>
<td>15</td>
<td>Torfaen County Borough Council</td>
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<tr>
<td>16</td>
<td>Vale of Glamorgan County Borough Council</td>
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<td>17</td>
<td>Denbighshire County Borough Council</td>
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<tr>
<td>18</td>
<td>Conwy County Borough Council</td>
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<td>19</td>
<td>Wrexham County Borough Council</td>
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<tr>
<td>20</td>
<td>Flintshire County Council</td>
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</tbody>
</table>
Figure 2. Powys Commissioning and Commercial Service Structure: Source: Powys Commissioning and Commercial Strategy 2017-2020 (2017, p.30)
Figure 3. Powys Commissioning and Commercial Hib and Spoke Operating Model. Source: Powys Commissioning and Commercial Strategy 2017-2020 (2017, p.31)